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Making Over Old New York

A Modern Development in Turtle Bay

Edward C. Dean, William Lawrence Bottomley, Associate Architects

By Ernest Peixotto

ONE of the most interesting problems confronting our architects in connection with the scarcity of apartments and domiciles in New York City has, undoubtedly, been the remodelling of blocks of old residences to meet the needs of modern life—houses, dating for the most part from the hideous brownstone period, bought in groups of ten to twenty and treated as a single unit to serve as co-operative community centres.

Detail in garden, Turtle Bay.

In my opinion the happiest solution of this particular problem, to date, is that known as Turtle Bay. Turtle Bay takes its name from an inlet of the East River that is so designated on the old maps of Manhattan Island. Its houses face on 48th and 49th Streets between Second and Third Avenues—ten houses on each street.

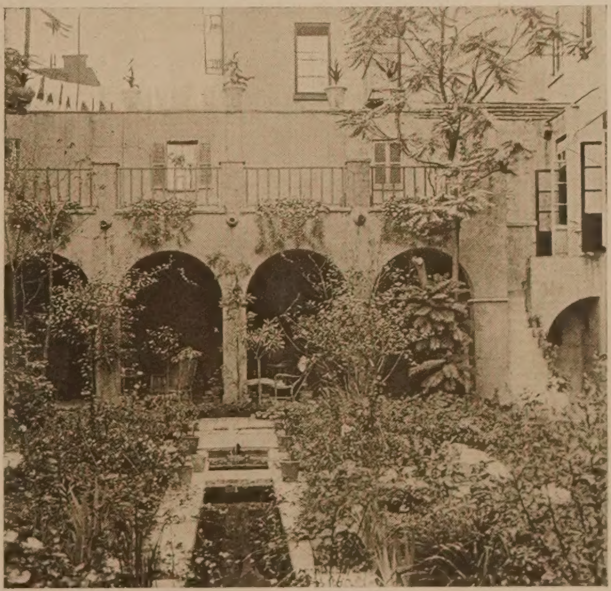
The stupid brownstone fronts have been scraped and stuccoed and relieved, on the 49th Street façade, with iron balconies and tall gables that recall the old houses of Antwerp or Bruges. The 48th Street front has been treated in a more severe style, with simple rows of windows surmounted by a long cornice and an attic story suggesting some row of Georgian houses in London or Liverpool. Both façades are enclosed by iron palings of simple design, whose spikes are, however, surmounted in places by turtles that recall the name of the place.

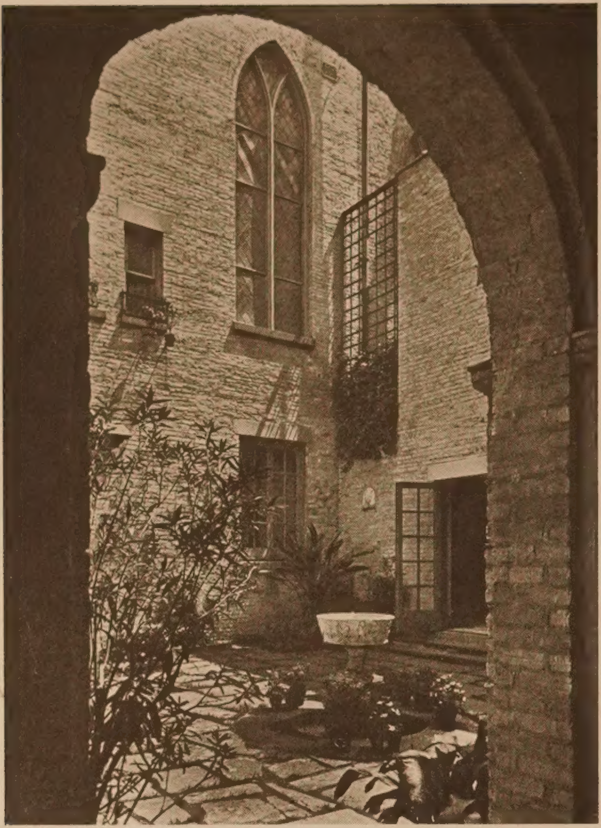
The architects associated in the remodelling of Turtle Bay were Edward C. Dean and William Lawrence Bottomley. Both are known for the picturesque quality of their work. Both love color; they both love the unexpected in design, the accidental. Mr. Dean's remarkably interesting work in the Women's Cosmopolitan Club has already been presented to readers of ARCHITECTURE. His more recent reconstruction of a group of Neo-Greek houses on the old London Terrace in West 23d Street for the New School for Social Research has added greatly to his reputation, as in this able piece of work he has achieved a remarkable result with the use of the utmost simplicity of design and materials.

In Turtle Bay, however, he has found the best opportunity that has thus far come his way, and it is in the garden and in the interiors of the houses that his talent has found its best expression.

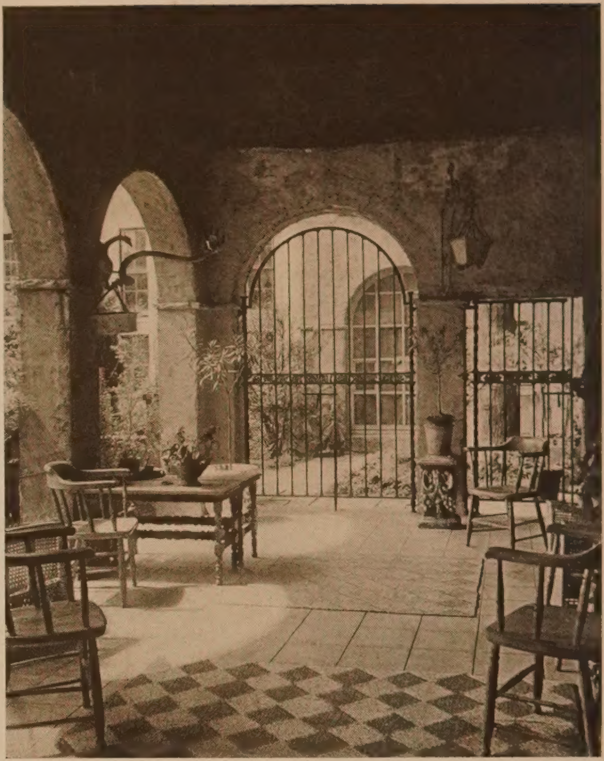
The plan of each house has been reversed, so to speak. That is to say, the living-rooms, dining-rooms, and the more important bedrooms face into the gardens, while the kitchens and rooms of lesser consequence front upon the street. The large interior garden is the unique feature of Turtle Bay. The high "back-yard" fences have been removed and replaced with low stone copings that mark the limits of each private yard.

But down the centre of the garden a broad passageway has been left that is common ground, and this has been embellished with a number of charming features: pergolas,


Garden loggia, Turtle Bay.



Detail in Cosmopolitan Club. Edward C. Dean, Architect.



Loggia of dwelling, Turtle Bay.

fountains, gate-posts, and runlets of flowing water. The individual gardens have also been planted with cedars and handsome trees and decorated with pools and fountains and with stone and terra-cotta pots placed along the wall tops, which, by a clever treatment of brick and stucco, already look quite old and weathered.

In order to cut off the view of the adjoining houses, loggias have been built at the east and west ends of the garden, consisting of sturdy arcades surmounted by terraces backed with high walls adorned with flower-pots. These loggias have been stained a warm salmon pink that recalls the garden walls of the Italian Riviera, while all the houses that face into the garden are painted in pale pastel colors—pink, gray, mauve, blue, and light ochre—that remind one of the gay streets of Nervi or Rapallo.

Yet, strangely enough, Turtle Bay, in spite of these features, does not seem too exotic nor out of place in busy New York City. Perhaps this is in some measure due to the people who live in it, for they are, for the most part, well-known writers, architects, or artists whose background is cosmopolitan rather than provincial.

The individuality of the owners is also indelibly stamped upon the interiors of the houses. Some of these are quite simple, depending for their effect upon plain wall spaces and old-fashioned furniture. Others are treated with the most modern of colorings and hangings, while others again are decorated in an oriental manner with Chinese carvings and stuffs, and with rare, exotic *bibelots*. One owner, who occupies two houses, has created a great living-room, a lofty chamber whose coffered ceiling is supported by sixteen-inch beams and corbels and decorated in the manner of the Italian

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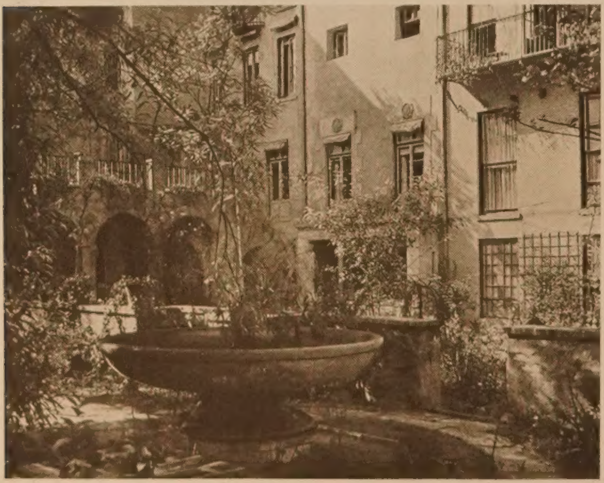
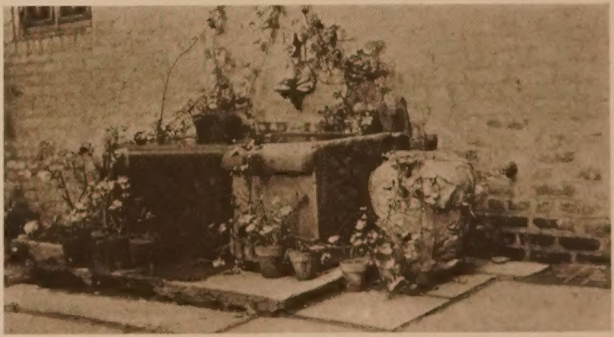
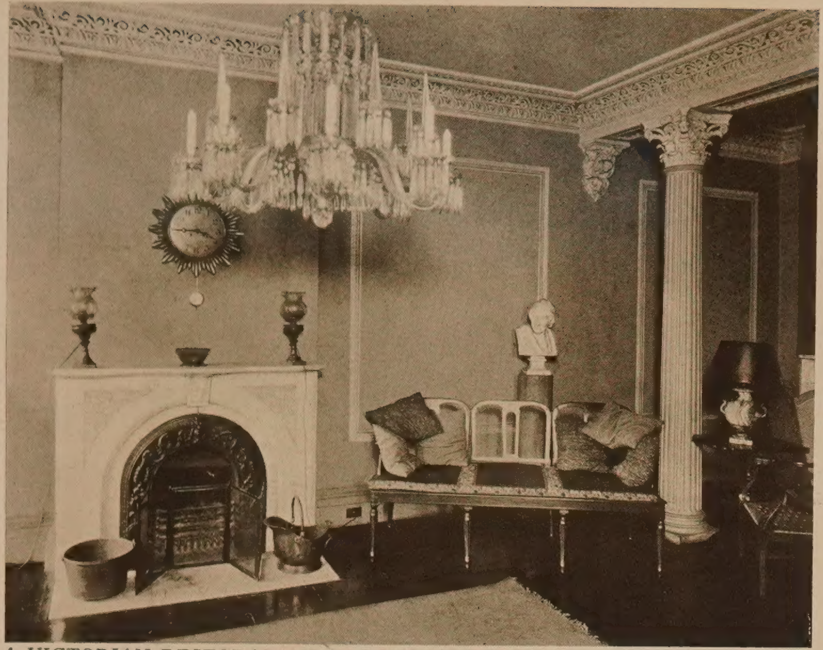


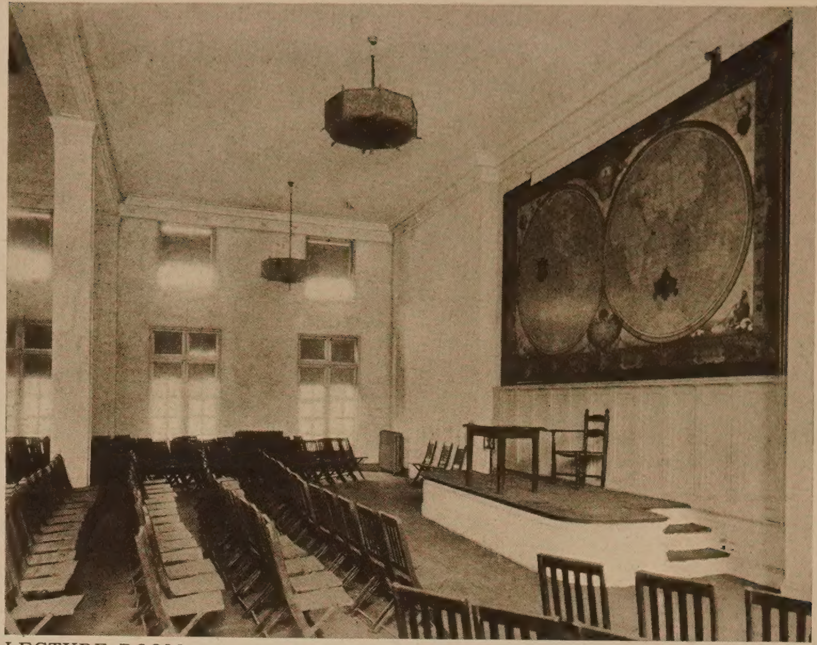
Alterations to rear of dwellings, Turtle Bay.



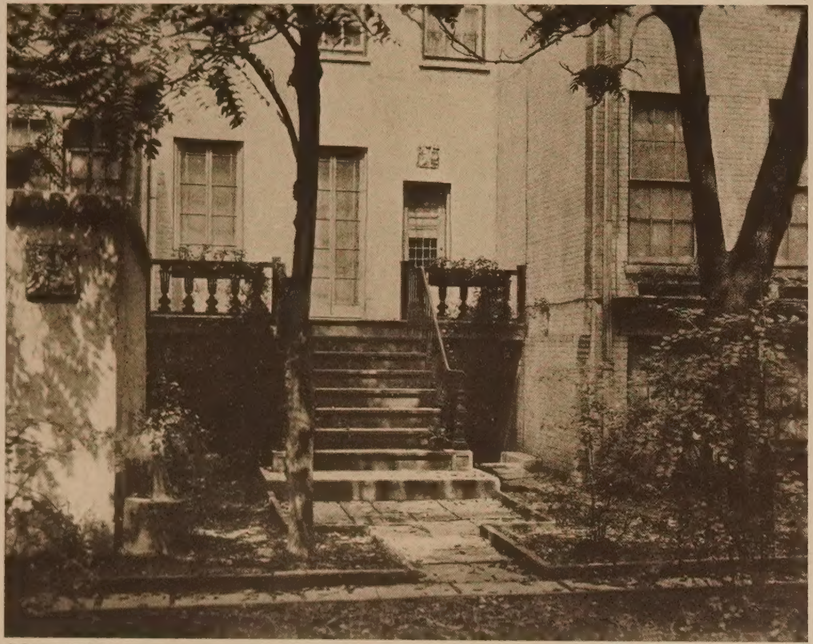
A wall fountain, School for Social Research, New York City. Edward C. Dean, Architect



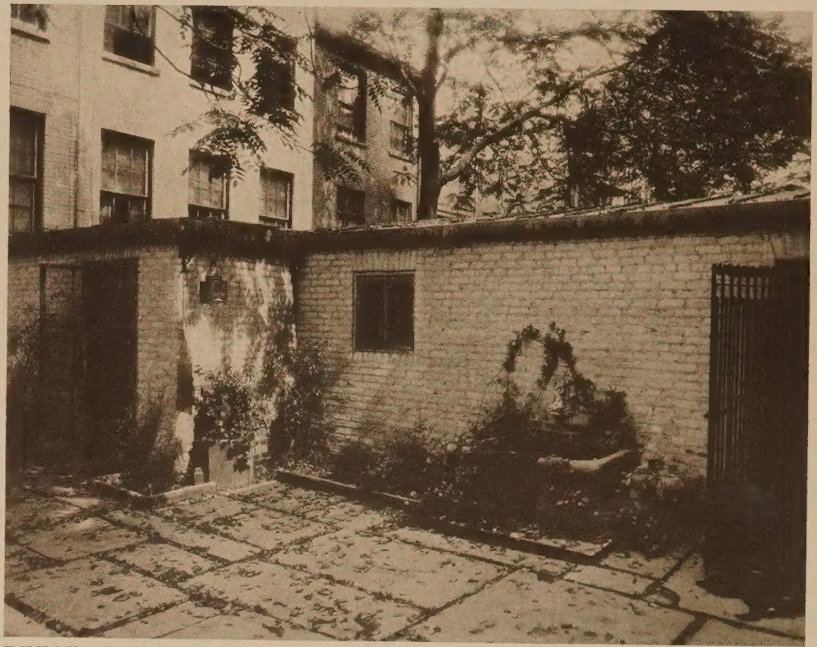
A VICTORIAN RESTORATION IN LONDON TERRACE.



LECTURE-ROOM.



COURTYARD.



DETAIL OF COURTYARD.

Edward C. Dean, Architect.

NEW SCHOOL FOR SOCIAL RESEARCH, NEW YORK CITY.

A Spanish balcony, Turtle Bay.

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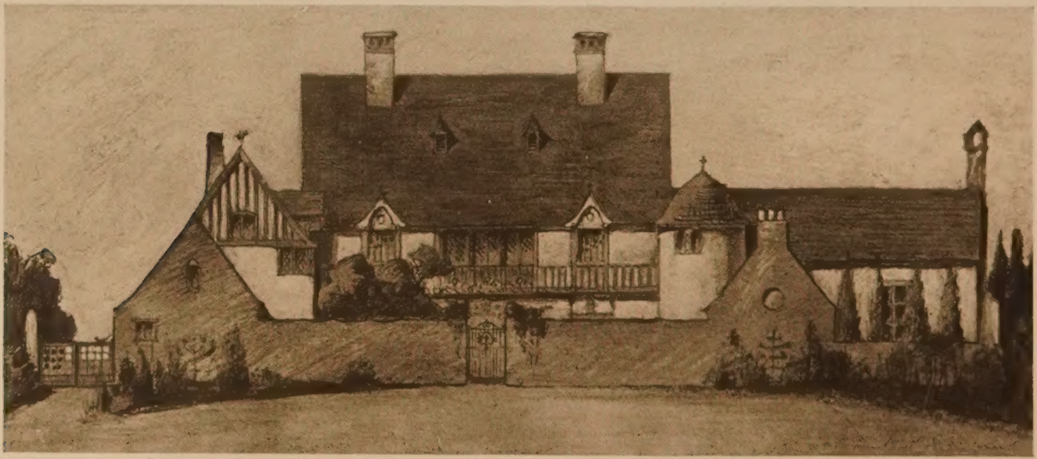
Renaissance. The frieze is treated in similar fashion and the walls are hung partly with superb tapestries and partly built in with tall bookcases that accommodate a library of several thousand volumes. The effect of these rich tapestries and handsome bindings and of the stained and painted ceiling and frieze, combined with beautiful and carefully selected furniture, is really magnificent, and one can scarcely believe that this great room, with its Old World atmosphere and rare *patina*, was created only within the past few months.

The same may be said of Mr. Dean's own residence. With his love of the unusual, he has produced a remarkably interesting series of apartments, that cannot be classified under any of the well-known "styles," yet constantly suggest the rooms in European houses, for in them he has utilized antique columns and capitals, gilded caryatids, painted panels and icons, brocaded lambrequins fringed with gold galloon—yet using all these features with notable restraint, contrasting their richness with perfectly plain wall surfaces of beautiful texture; suggesting in his combinations of richness and simplicity the work of the Hispanic builders who loved to display their elaborate bits of detail against perfectly plain and simple walls.

This, indeed, is the key-note of the work at Turtle Bay: a union of simplicity with the beauty of unusual things; a picturesqueness that would make an artist want to run and get his sketch-book; a personality and an atmosphere of quiet charm, combined with a feeling of "rus in urbe" that will make of each of its inhabitants a lover of his own particular home.

The central garden-path, Turtle Bay.

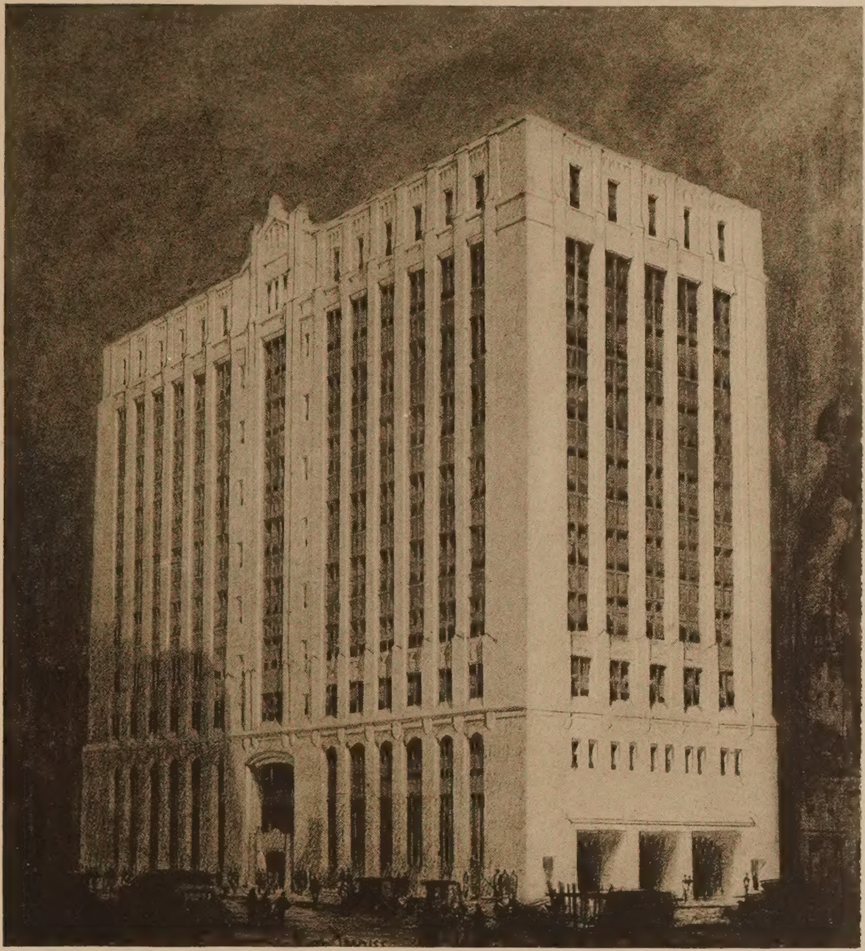


Study for a French farmhouse to be built in Maryland. Edward C. Dean, Architect.

The Fletcher Building

A Fine Example of the Use of Reinforced Concrete

By Frank J. Helmle



The Fletcher Building. New York City. Helmle & Corbett, Architects.

REINFORCED concrete has for several years been the standard material for the construction of factories and warehouses. It has also been used extensively for hotels, offices, and loft buildings, but this use has been much more general in the South and West than in New York.

There are several reasons for the backwardness of New York architects in adopting reinforced concrete for the above uses. One reason is that in the case of buildings over twelve stories in height reinforced-concrete columns, if used in the lower stories, would be of excessive size. Another reason is that it is difficult, if not impossible, to obtain for the exterior surfaces of a concrete building the absolute perfection of texture and alignment which can be obtained with cut stone or brick. A third reason is that structural steel has been the established material for use in buildings in the metropolitan area for a great many years. Architects, owners, and contractors have all been familiar with the details of structural-steel construction, and a considerable amount of inertia has had to be overcome in changing from one standard and satisfactory method of construction to another.

Reinforced concrete has probably been the most economical form of fireproof construction ever since it passed the experimental stage. Prior to the present period of inflated prices the margin in favor of reinforced concrete as against structural steel fireproofed was probably not over 10 or 15 per cent of the cost of the structural frame of the building. This was equivalent to possibly 5 per cent of the total cost of the building, and was, except in the case of the most progressive architects and owners, not sufficient to overcome the inertia above referred to. At the present time, however, the margin in favor of reinforced concrete is approximately 40 per cent of the cost of the structural frame. This increase in margin is partly due to the constantly widening experience of the reinforced concrete contractors' organizations and their workmen, partly due to improvements in standardization of methods, and partly due to the high cost of structural steel and brick as compared with reinforced-concrete materials.

It has therefore become necessary that architects, in the interests of their clients, should consider seriously the

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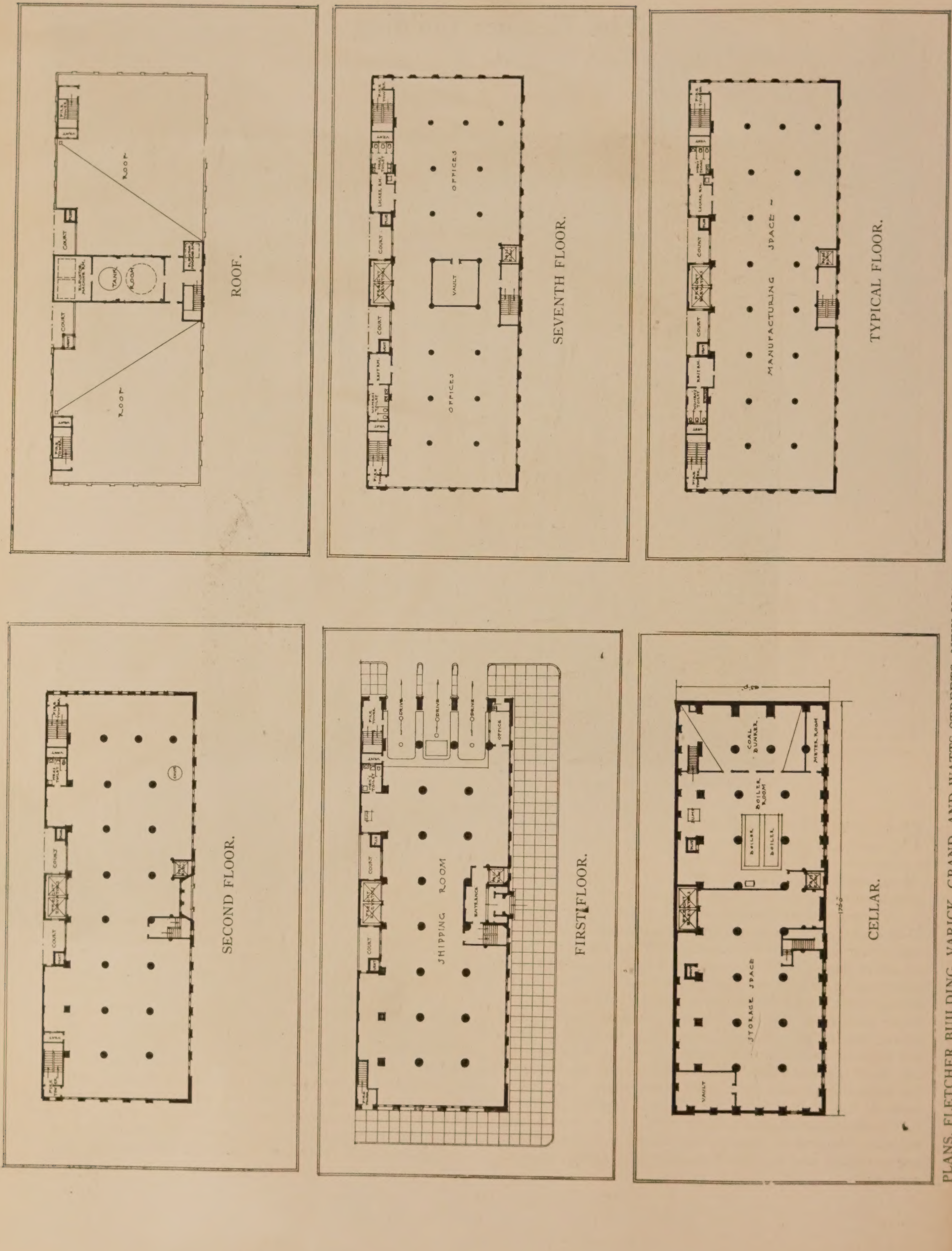


ROOF.

SEVENTH FLOOR.

TYPICAL FLOOR.

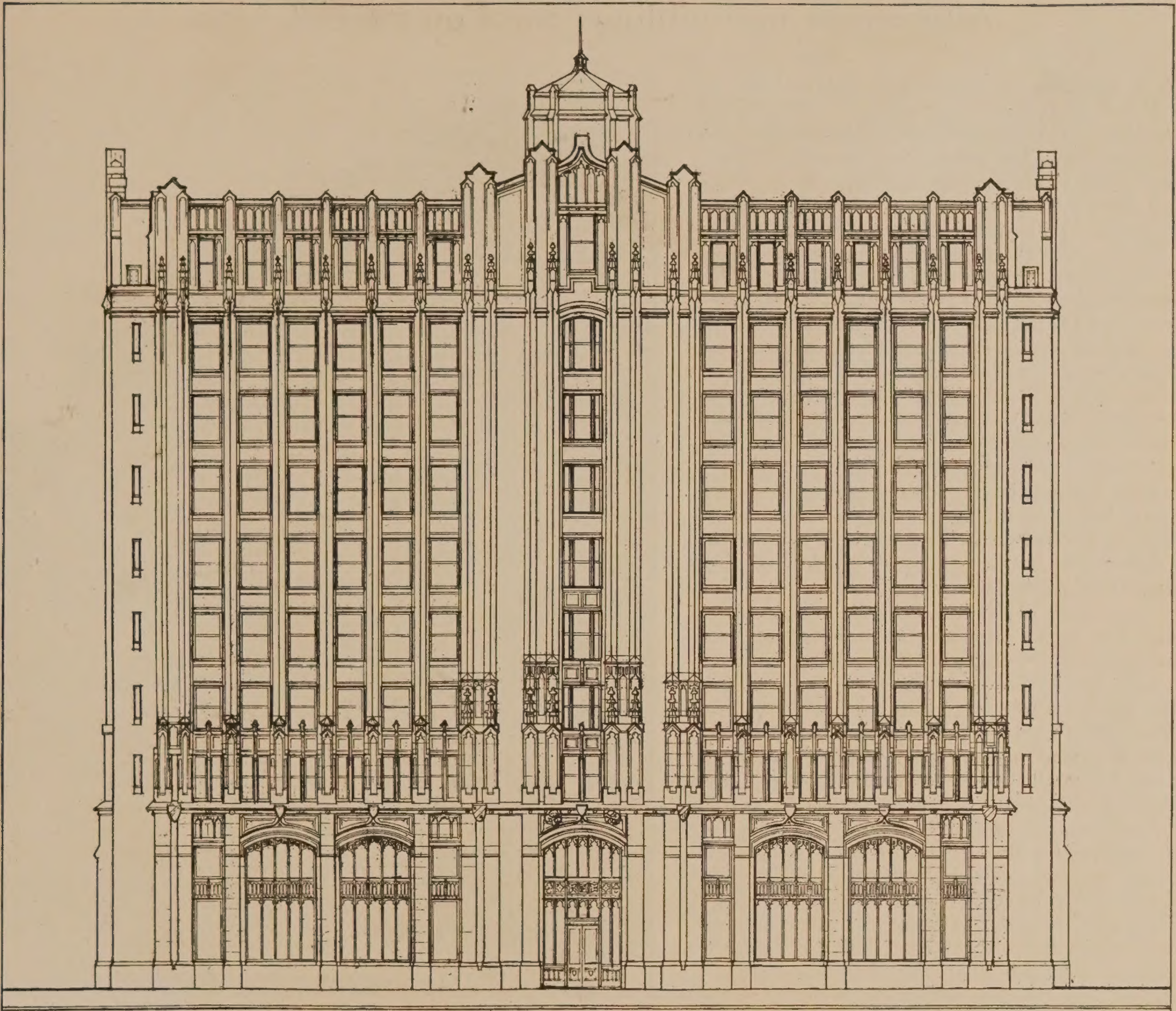
SECOND FLOOR.

FIRST FLOOR.

CELLAR.

PLANS, FLETCHER BUILDING, VARICK, GRAND, AND WATTS STREETS, NEW YORK CITY.

Helmle & Corbett, Architects.



VARICK ST. ELEVATION
FLETCHER BUILDING
VARICK - GRAND - AND - WATTS - STREETS
NEW YORK CITY
HELMLE AND CORBETT - ARCHITECTS - BROOKLYN - N.Y.

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use of reinforced concrete. As a matter of fact, the disadvantages referred to in the early part of this article, namely, column sizes and exterior appearance, are far less serious than many have supposed. A reinforced concrete column in the first story of a twelve-story building, having columns 18 inches on centres in both directions and designed to carry live loads of 150 pounds per square foot, would be a round column 30 inches in diameter. If, for some special reason, it should be necessary to make the columns in the lower stories even smaller than this, structural-steel cores could be used at an additional expense, which would use up only a very small part of the saving effected by the use of reinforced concrete for the balance of the structural members.

Regarding the external appearance of a reinforced-concrete building, the accompanying cut of the Fletcher Building on Varick Street, New York, shows what can be done. The exterior of this building is entirely of reinforced concrete, but there are endless possibilities in the combination of brick, terra-cotta, or stone with concrete surfaces.

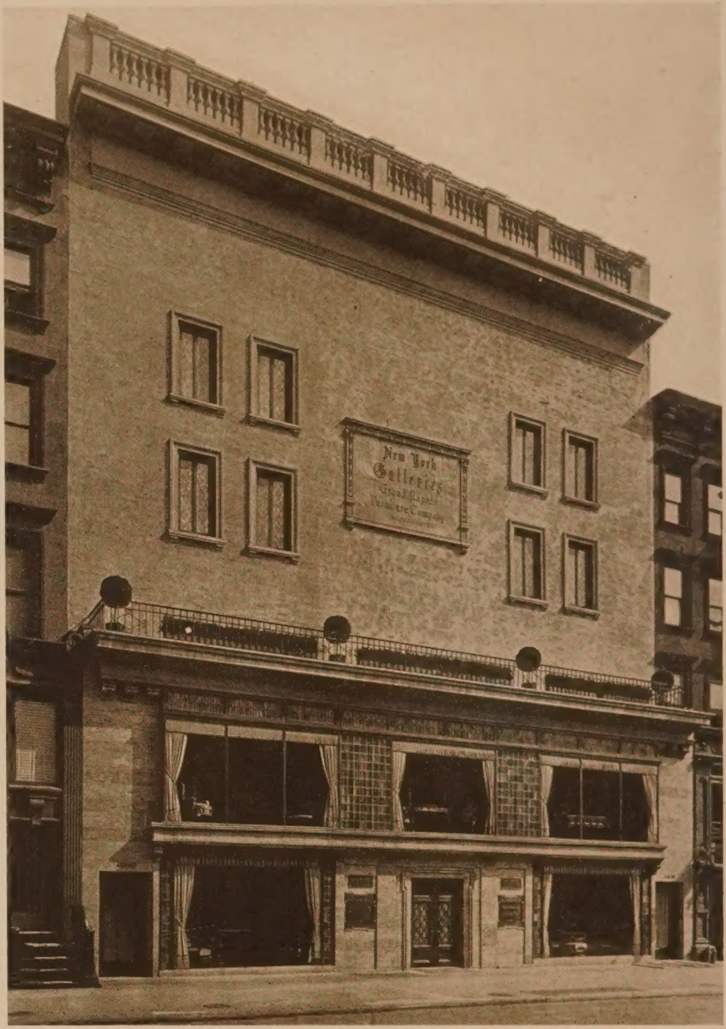
An important point for consideration is that with an all-concrete exterior the expense incurred for architectural effect is very small, as most of the architectural members are also structural members. It is probable that in the cost of the Varick Street building the cost of the exterior walls, including ornamentation, is no greater than the cost of the structural-steel wall columns, lintel beams, fireproofing, and backing would have been if this building had been constructed of structural steel. In other words, the entire cost of the face brick or stone work which would have been necessary with structural steel has been saved.

Another way of looking at it is that if an owner insists upon a brick or stone exterior this face work can be applied to a concrete frame as cheaply as to a steel frame, and the economy of using reinforced concrete in place of structural steel for the interior columns and floor systems will still accrue to the owner's advantage.

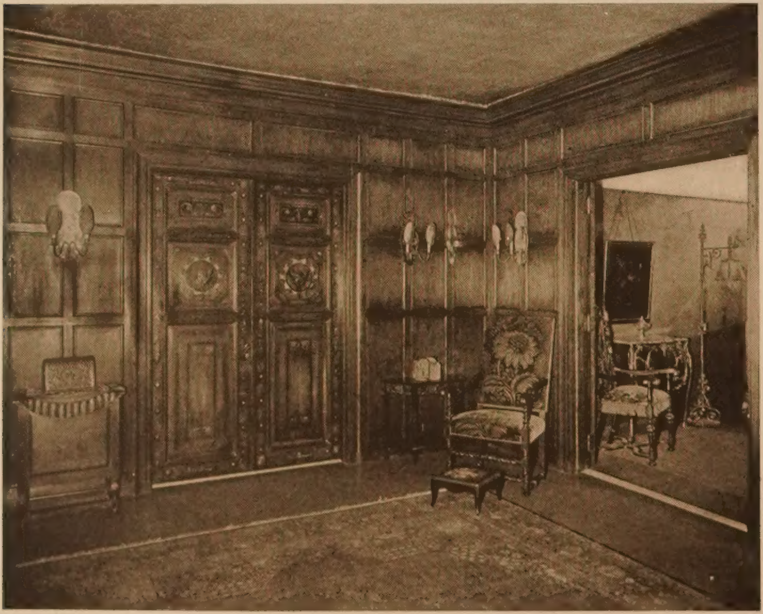
Alterations of Buildings for Commercial Uses

AN alteration is always a special problem, as well as an interesting study for the architect who likes to take advantage of difficult and unusual opportunities. The details involved are quite different from those of a new building, and are really in a class by themselves. The client says: "Mr. Architect, I have an old ramshackle building on Q Street, and I do not know how to make it over so that I may get the proper income from it." He turns the question over to the architect and, if the result is a failure, only the architect is to blame. He may be either incompetent or careless of his client's interest, or sometimes both. To some architects a job is merely a job—they work only for the money that they may make out of it. Others who have an interest in a particular piece of work take pride in doing their utmost to produce a finished and successful building, not only for the client's sake but for the reputation of the architect and the profession generally. If a client has a definite object to obtain, the problem requires very careful consideration.

The costs, of course, are always a serious item, and only careful attention to essentials and the ultimate profitable rental of the premises can compensate for these. Too often there are architects who will undertake such work with the idea that almost anything is good enough, not realizing that even in alteration work they have fine opportunities for originality and manifestation of their special knowledge. The speculative builder is usually anxious only to get the job finished. The architect with a proper sense of responsibility will carefully consider financial returns based on right planning that make for better renting values and a larger use of space. The radical, queer, and unusual thing is not to be tried, but the conservative and dignified styles with everything carefully designed and proportioned to the character of the building. The successful architect of to-day is one who not only looks at the money end of it, but who also takes the broader view of the public interest, of the advantage to the community of the properly designed and constructed building.



New York Galleries, 419 Madison Avenue, New York City. (Alteration.) Geo. Mort Pollard, Architect.



A room in New York Galleries.

In remodelling 419 Madison Avenue for the New York Galleries every detail was carefully taken into consideration. Materials on hand and the materials available in the market had to be considered. Special attention was given to the adaptability of the old buildings for their new and special use, and for an agreeable and attractive façade that would have commercial value in its appeal to the interest and the taste of the public. The building is clearly founded on Italian models, with broad masses attractively relieved by the placing of the doorway and the windows.

It is intended to carry out the interior of the building in a series of rooms carefully studied for the display of furniture groups,

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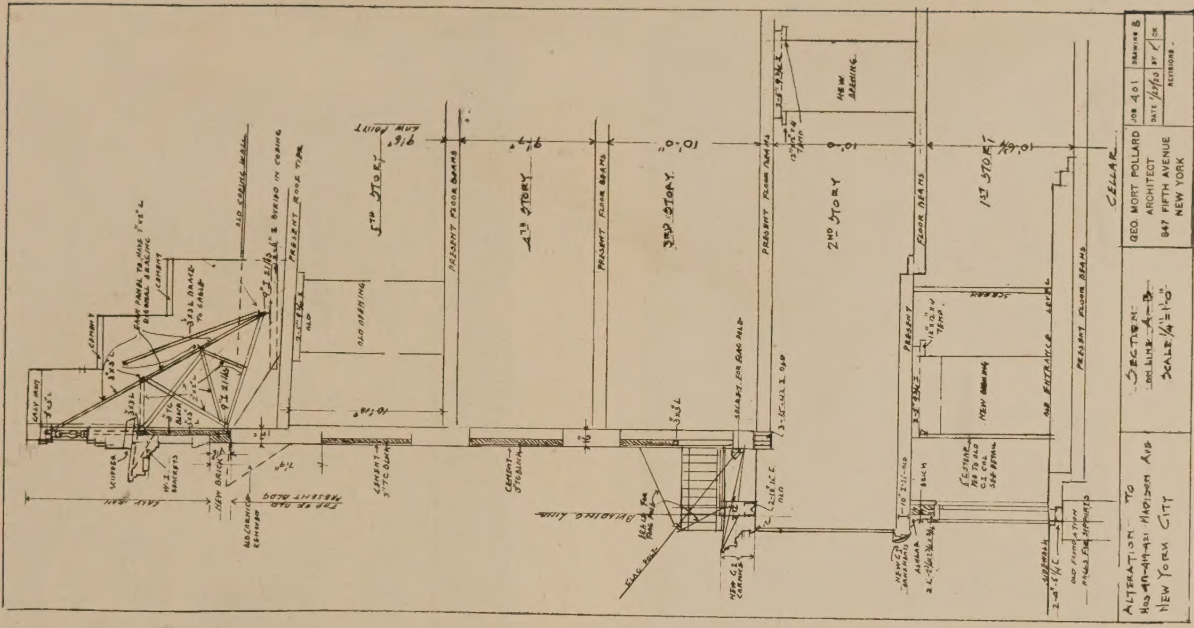
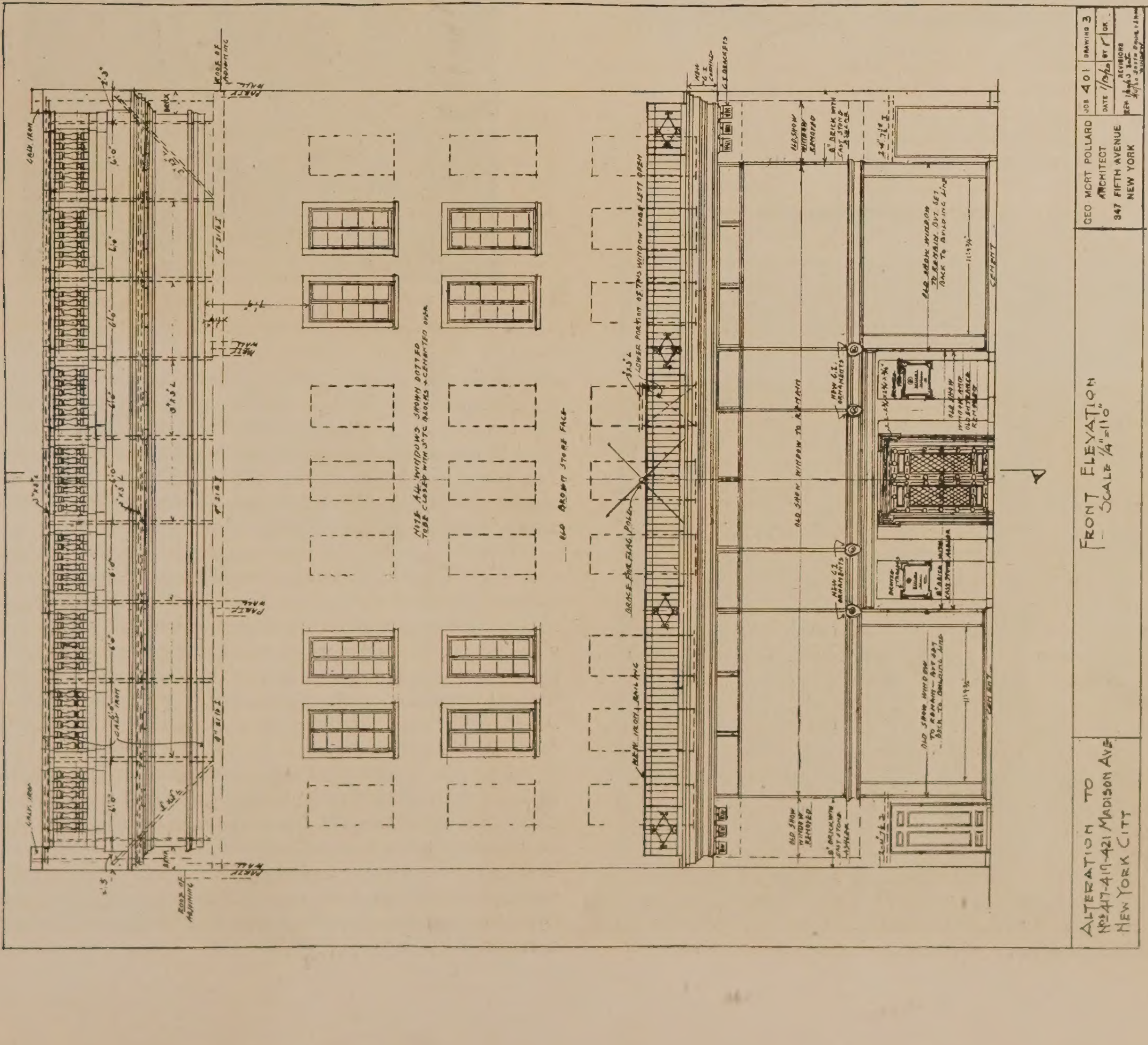
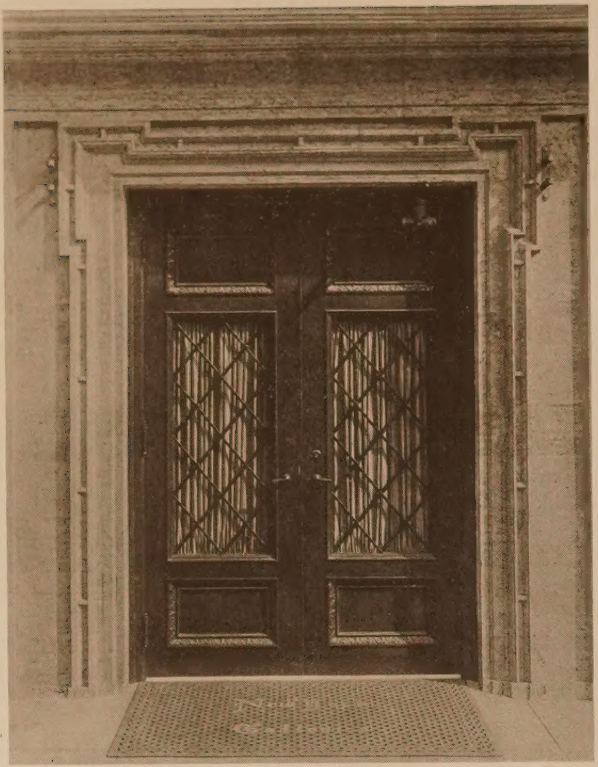




Geo. Mort Pollard, Architect.

BUILDING FOR NEW YORK GALLERIES, NEW YORK CITY. (Alteration.)



Doorway, New York Galleries, 419 Madison Avenue, New York City.

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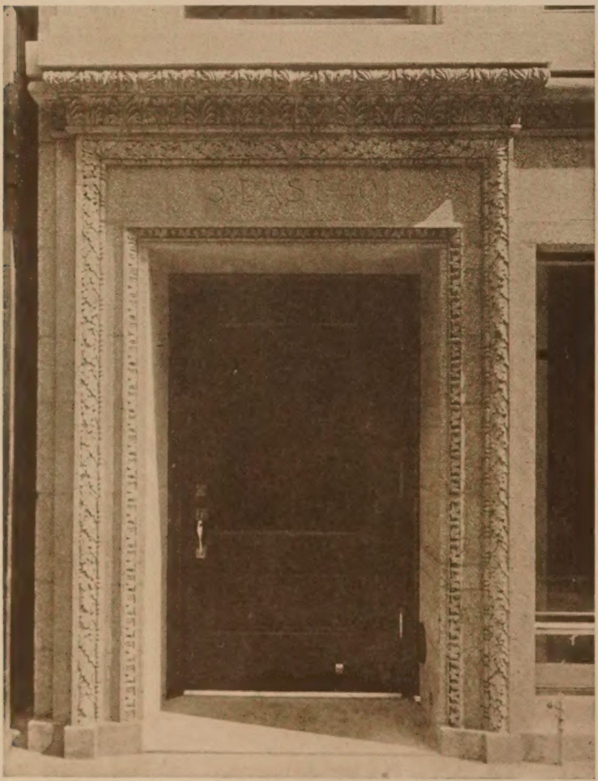
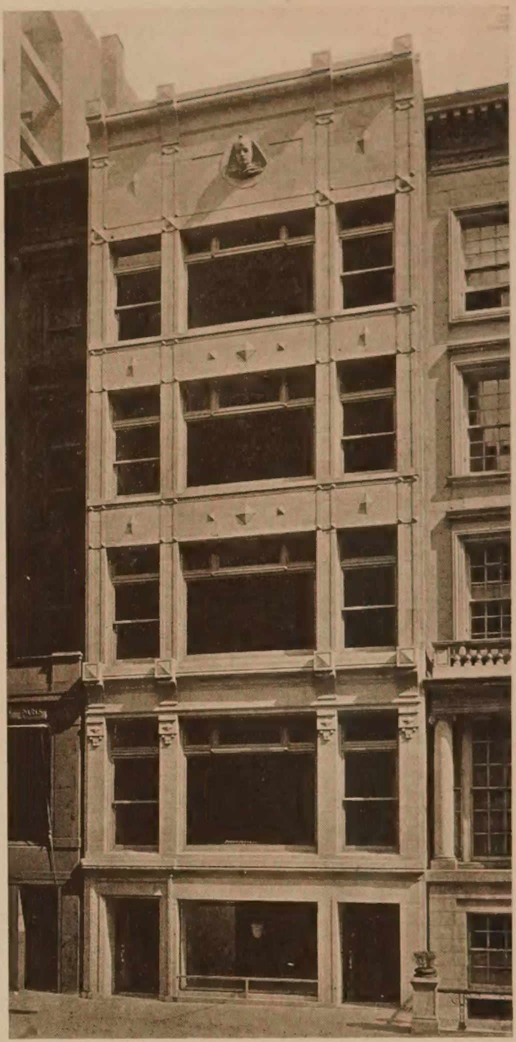
providing such backgrounds adequately to express and harmonize with various periodic styles. The room shown is one of six in course of construction. The basement below the sidewalk is to be in Caen stone, with flooring of broken flagstone set in cement. There will be a fireplace of artificial stone, with fifteenth-century fire-tools and implements. The space will have an area of 58 by 50 feet. On the top of the building, back of the balustrade, will be constructed a solarium for the display of garden furniture.



Doorway, 5 East 40th Street, New York City.



Egyptian Lacquer Co., 5 East 40th Street, New York City. (Alteration.)
Geo. Mort Pollard, Architect.

No. 5 East 40th Street, which was done for the executive office of the Egyptian Lacquer Company, required a very different study for the special needs of this business. The old house was remodelled from top to bottom, always with a view to the future development of the company and to the possibility of its outgrowing this building and the need of renting or selling it advantageously. Both these buildings are therefore types showing special consideration for stylistic details.

There is a refreshing and pleasing aspect in the result of such alterations, and in time promise the almost complete passing of the old brownstone era, rows of buildings of uniform ugliness, and inefficient planning. We owe the change to the opportunity offered by present needs and the fact that architects are given a chance to show that merely from a commercial point of view an attractive and individual exterior is the best of investments.

Editorial and Other Comment

Our New Architecture

IF there was ever any doubt in the minds of the profession or the public as to the wisdom of New York's new zoning laws, with regard to their influence upon the quality of our architecture, it is being dissipated rapidly by the obvious success and distinction of the new business buildings that have been and are being constructed under its wise provisions.

There have been new problems presented for the architects to solve, and they have generally met them with the intelligence and good taste that might be expected of them. Fortunately, they have in most cases had the sympathetic co-operation in their problems of the business concerns which have supplied the capital.

The great masses of straight walls reaching skyward, that have always been so difficult to handle, now broken up into separate planes above a certain height, add a new element of the picturesque, as well as new elements of light, air, and protection for neighboring buildings. There is every promise of a great new development in which mere size and bulk will be subservient to a larger consideration for both beauty and fitness. The high building will make a new appeal to the artistic sense, as well as the practical one, of all concerned.

Taking It Seriously

WE have awakened apparently to the increasing menace and dire need of housing all over the country. For a long time the shortage, with its consequent congestion and dangerous unrest, has been very much in evidence, and a lot of words have been spilled in discussing ways and means of remedying conditions; but it has taken the imminence of the beginning of a new renting season and the prospect of thousands of evictions, the consequent legal complications and downright hardships, not to say possible riots, involved, to bring about any real, concerted legislative action.

New York has decided against mortgage exemption on new building, and has decided to let savings-banks mind their own business. The part of the discussion that seems worthy of the minutest examination is the question of profiteering in essential building materials.

There has been too much meddling with the natural laws of supply and demand, but these are abnormal times and old ways have been forgotten in the insatiable greed that has governed the control of certain kinds of business. Competition has been at a standstill, for why compete when there is not enough to go around, and the smallest merchant can vie with the big one and follow his lead in the general game of making hay while the sun shines?

No one needs to be told that the mood of the time is: "Get it—never mind how, but *get it.*" The following, from a recent editorial in *The American Contractor* of Chicago, admirably expresses the attitude of thousands of workers:

"The 'go to h—' attitude toward the job is so universal that those who realize productive effort is the foundation of society cannot escape the keenest anxiety for the future of this and other nations. When it becomes the rule rather than the exception that workers everywhere are dishonest in their attitude toward work and employment, quite as a matter of course, our system is not 'threatened' with decay but already is crumbling.

"The labor-unionist and the liberal economist will explain that the wage scale and working conditions are chiefly to blame. There is involved something more than this, something vastly more fundamental and dangerous. There is involved an ethical code and a concept of honor and honesty. Granted that a wage may be too low, or too high for that matter, when an individual has agreed to do a specific task for a specific wage, accepting the wage without doing the task to the best of his ability is a dishonest thing and nothing else can be made of it.

"The attitude is not limited to organized labor by any means. Everywhere one finds evidence of a determination on the part of producers to render the least service for the most pay without doing the service agreed on.

"Are we reaping the results of an educational system which overemphasizes material success and measures respectability in terms of bank rolls? The law of business as it is taught everywhere is to buy as low as possible and sell as high as possible, and when that formula is translated into the attitude of producers it is bound to kill our pride of workmanship and ideals of service."

A Grave Question

THERE is one aspect of the present congestion of population in our cities that seems to need the gravest thought and consideration of what it means in the future. The gate of our country is again wide open, and the officials at the Ellis Island Immigration Station are literally overwhelmed by aliens who are coming to us in great hordes—thousands upon thousands—a large part of them destined to stop at already congested centres, where they will swell the dangerous and unassimilable groups of foreign-language-speaking people that segregate in their own particular sections and add to the already seemingly insoluble problem of housing. Would it not be well for us to first try to put our house in order before we open the doors to guests we have no room for?

The war taught us no greater lesson with regard to our home affairs than that, in making our American army, we had first to teach thousands the meaning of the simplest words in our language primer; and need we have a greater lesson in caution regarding the character and quality of a new immigration than such a horror as the recent Wall Street explosion? Do we not owe something to the people already here? Is not our problem of making the world safe for democracy dependent first upon the regulation of our own affairs? Is there justice or charity or right in permitting the steamship companies to profit at the expense of thousands of deluded people who are led by their specious propaganda to forsake Europe and come to a land that already needs time to absorb and educate in our own ways of thought the millions of aliens already with us?

We should at least be in a position to select our associates with some regard for what is good for this loved country of ours. It is a heritage of freedom that we should pass on, but a freedom that must respect our laws and our traditions, with a regard for our language and the thought of our national unity, made up of *Americans* either native or foreign-born. We permit the adult alien, who too often can neither speak nor write our language, to become a voter in too short a time. We keep open house for those we cannot accommodate nor begin to assimilate—for many who neither understand us nor try to.

One of our newspapers said recently in an article upon the conditions at Ellis Island:

"The State Department may send instructions to American consuls abroad to exercise greater care in giving permission to aliens to come to the United States. The parasitic element is more noted among the recent arrivals than heretofore. The consuls are not having very much difficulty in halting radicals, but it is the shiftless element and the destitute that will be stopped before they embark."

The labor problem is already a grave one and should we not be sure there is work ahead for all those here before we go on adding a greater mass of people who with present conditions only make the difficulty of solution greater?

Home-Building and Labor

IT is labor in the guise of carpenters and masons and others who are making home-building for thousands impossible. There is an evident downward trend in the cost of materials, lumber, cement, brick, but labor stands pat, and those who might build are appalled by the cost of labor calculated in day's work. If labor worked with the zeal of honest craftsmen in honest work, the day's accomplishment in speed might offset the heavy toll in the cost per hour. But the conscience of labor in the mass seems to have become atrophied. It is no longer how much can be done, but how little; and the old pride in good work, the self-respect that belonged with an honest day's work honestly done and as far as it could be done, no longer governs; the lazy, the inefficient, and the trouble-makers, who would live as the lilies of the field, are at par with the men of real skill and special knowledge.

In figuring the cost of building any sort of a house in these days, one should begin with the cost of labor, and add to any estimate of before-war times anywhere from thirty to forty cents an hour for every man employed, and remember also to deduct about the same ratio for inefficiency.

It is labor that must be awakened to the need of greater production within a given time, if wages are to be maintained and the work of rehabilitating the world, of making life easier for labor and for us all, are to be realized.

There are already signs that some wise heads are beginning to see light. A new association to be known as "The National Industrial Commerce of Building and Construction" was organized recently in Chicago, representing both capital and labor, pledging that they would "pull in harness until the shortage of one million homes in America is filled." Verily we may yet be in sight of balm in Gilead, and the sound of the hammer on the million homes may be as the ringing of glad bells.

Go to it!

The National Council of Architectural Registration Boards

THE first formal meeting of the National Council of Architectural Registration Boards will be held in St. Louis, Missouri, on November 18 and 19, 1920.

All architectural registration or licensing departments, boards or committees throughout the United States are invited and urgently requested to send representatives to this meeting in St. Louis.

While membership in the council is restricted to the legally appointed representatives of the registration or licensing authorities of States having registration or license laws, the council would be glad to welcome the attendants at the council meeting of committees of architects from States having no registration or licensing laws.

Legislative committees from States having laws pending will find the proceedings of the council very helpful and instructive. Among the papers to be presented will be a report of a committee appointed at the Washington conference to make a careful, analytical, comparative study of the various registration laws now in force in the various States. Efforts will be made to harmonize these various requirements so as to make easy reciprocal transfer from State to State and thereby facilitate interstate practice.

A desirable outgrowth of the conference will be the formation of some sort of clearing-house of information with reference to the records of architects asking extension of registration from one State to another. It is hoped that the council may be able to recommend a uniform law, which may be adopted by the various States.

Committees and registration officials are urged to make arrangements for representation at the earliest possible date and notify the secretary of the council, furnishing the names and credentials of their official representatives.

The Money Value of France's Loss in Art Treasures and Historic Monuments

ONE of the most interesting items in the latest inventory of the losses of France through the war is that which tells of the extent of the damage to her art treasures and historic monuments. The official estimate for this loss, which has been obtained by the Paris Information Service of the Bankers Trust Company, is placed at over $125,000,000.

This figure, which has been recently calculated for the information of French minister delegates to forthcoming international conferences, has been arrived at after an exhaustive examination of the ruins of historic monuments, statues, churches, museums, and their contents. The irreplacable nature of these losses is indicated by the sum of 600,000,000 francs which is set against "moral injury."

"This sum of 600,000,000," explains the official text, "is an approximation of the loss the French people have sustained by having lost forever works of peculiar value because of their beauty and historic associations."

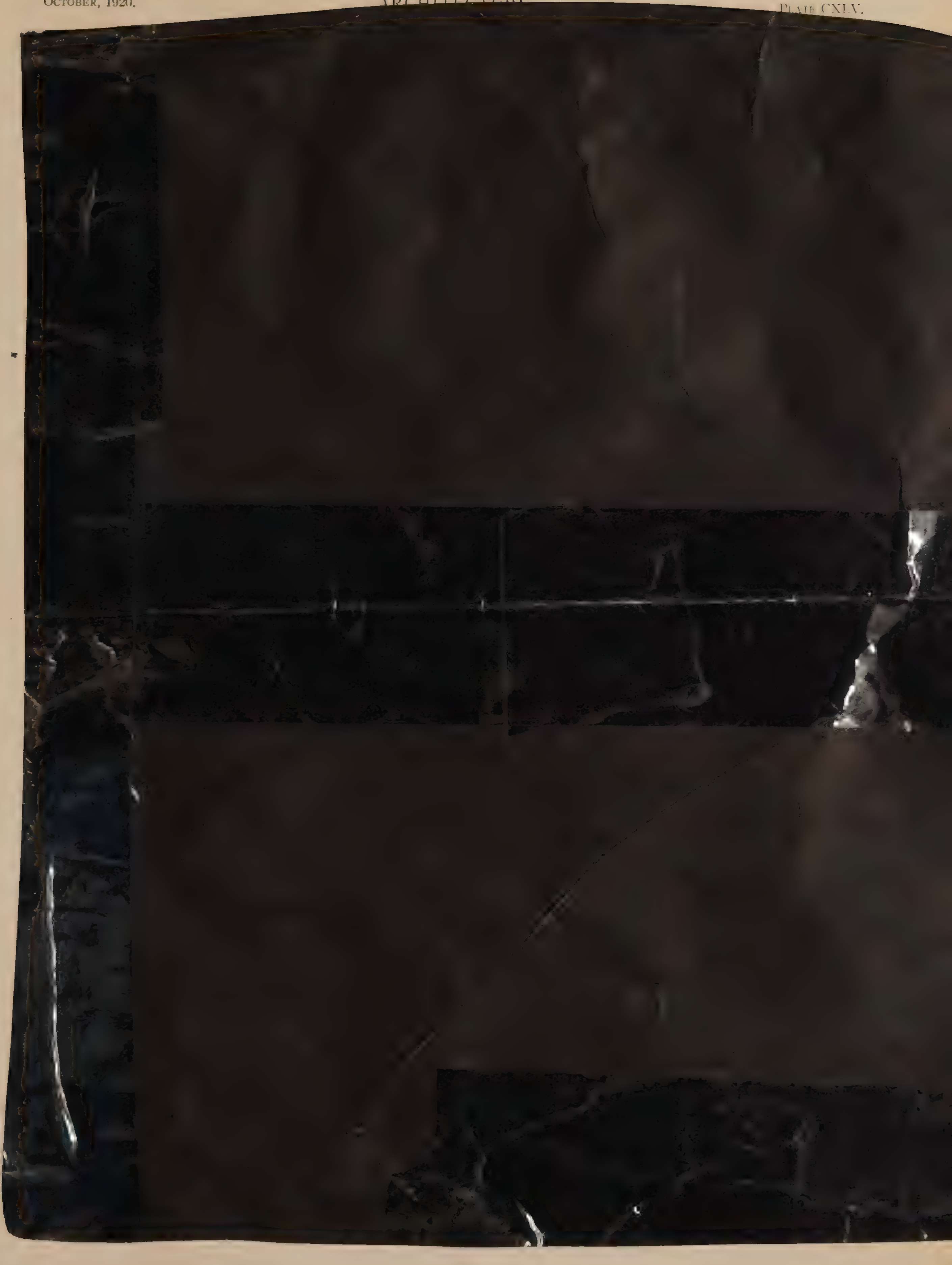
In order that a fair statement of values might be made the art commission sets forth the losses in terms of both pre-war and post-war currency as follows:

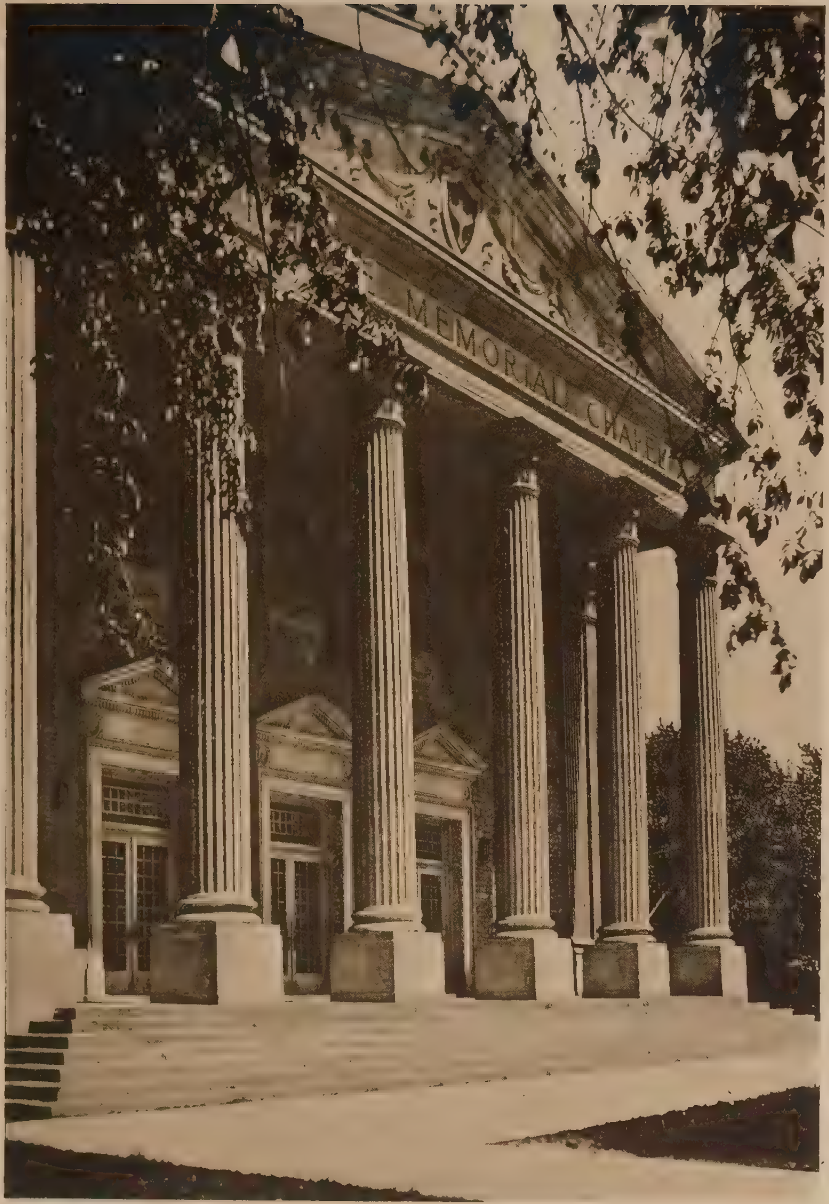
	1914 value	1920 value
Historic buildings (750 in all)	300,000,000 francs	1,200,000,000 francs
Historic monuments	25,000,000 "	50,000,000 "
Museums	15,000,000 "	30,000,000 "
Moral injury	300,000,000 "	600,000,000 "
Total	640,000,000 "	1,880,000,000 "

The 640,000,000 francs of losses, on the basis of pre-war values, are equal at normal exchange, which then prevailed, to about $128,000,000.

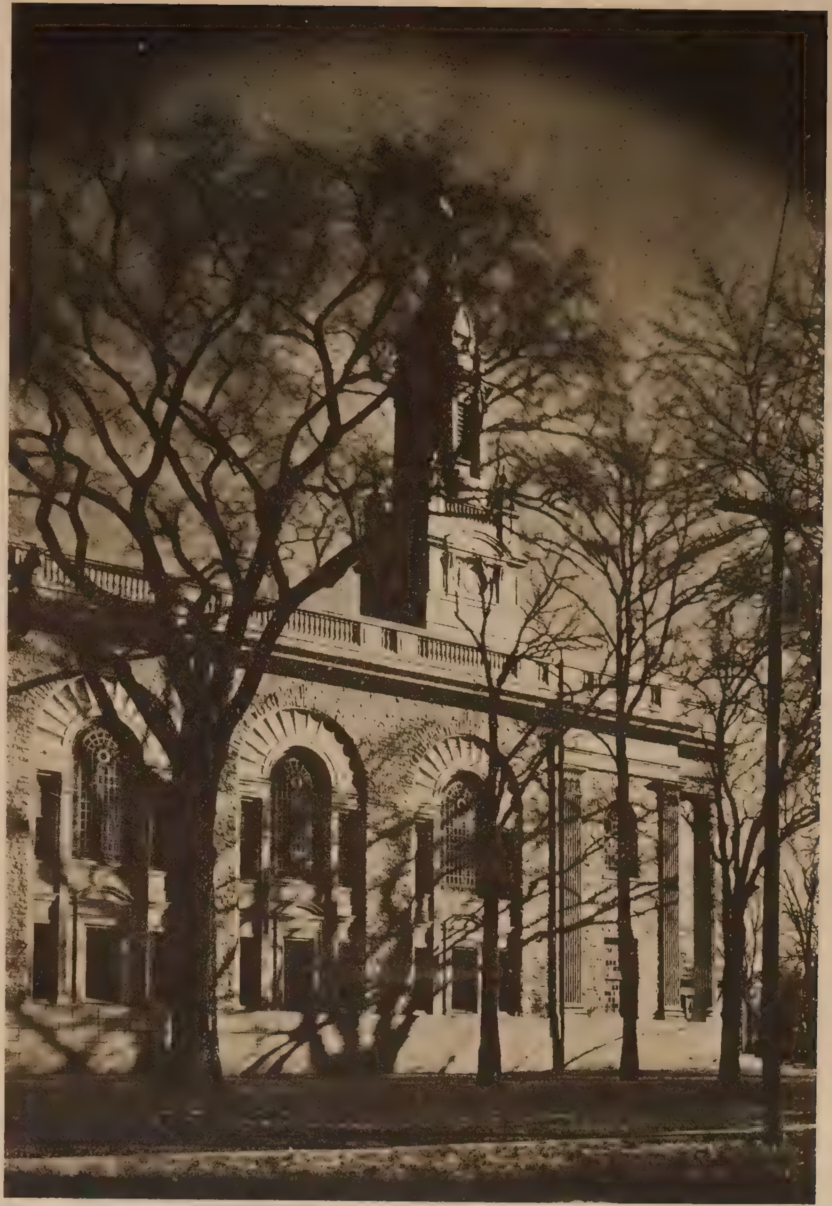
An estimate of the loss in stolen or damaged jewelry and precious stones is placed at 1,119,000,000 francs, present values.

The loss in personal property and objects of art owned by private individuals has been placed at 4,500,000,000 gold marks.





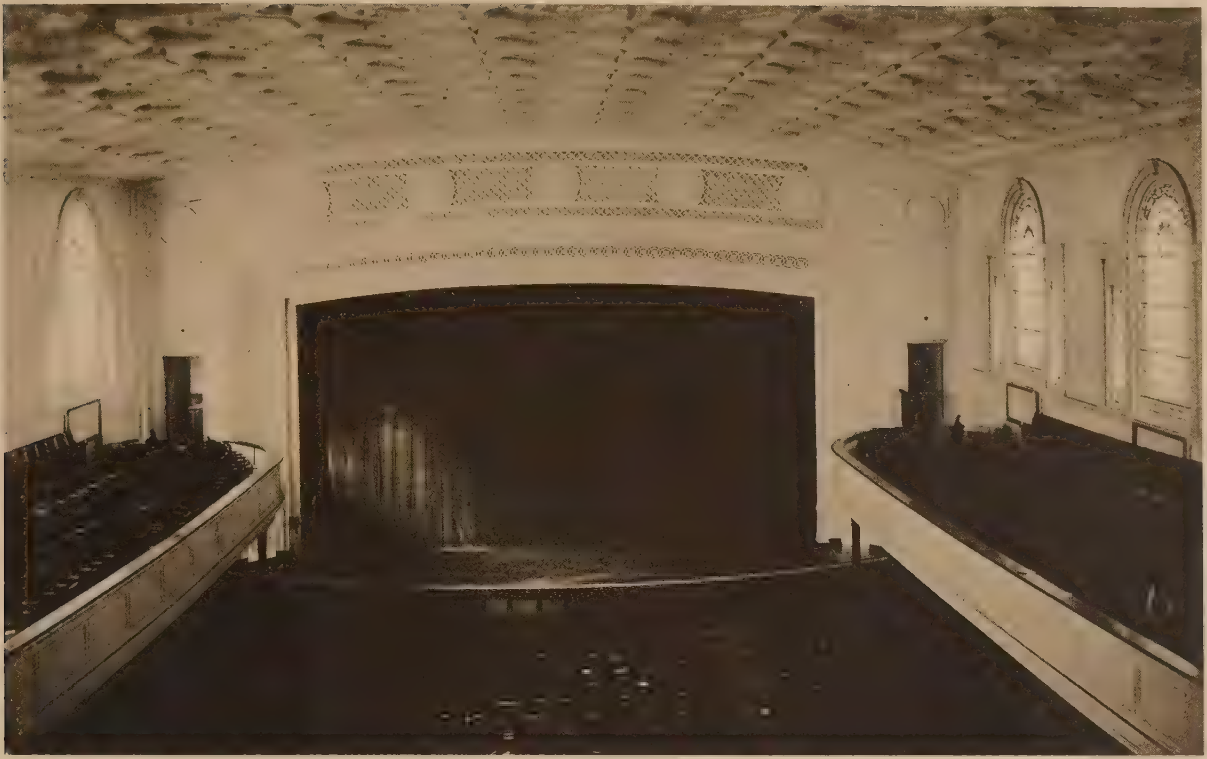
PORTICO.



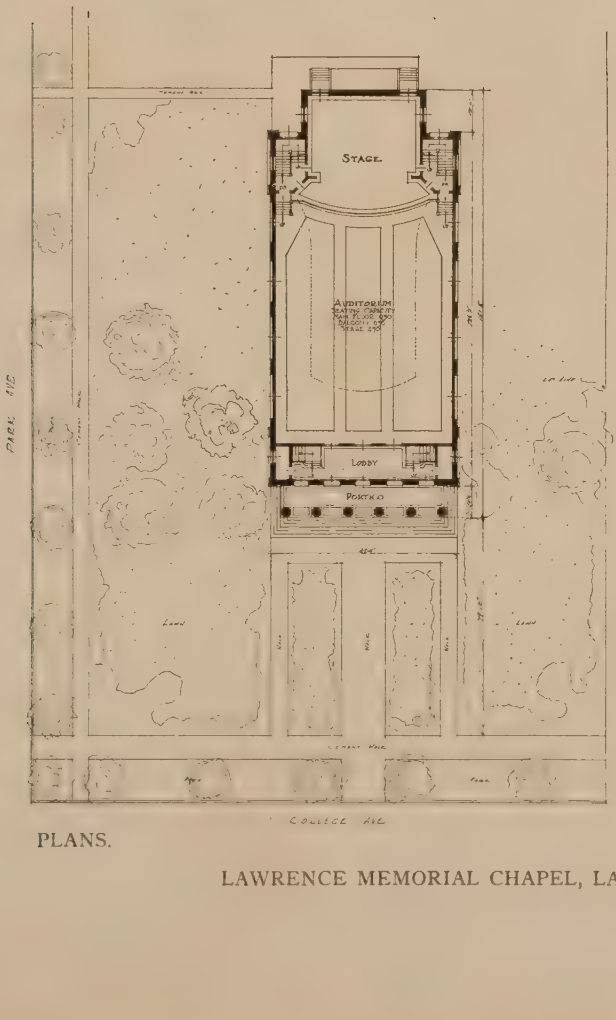
DETAIL OF WINDOWS ON SIDE.

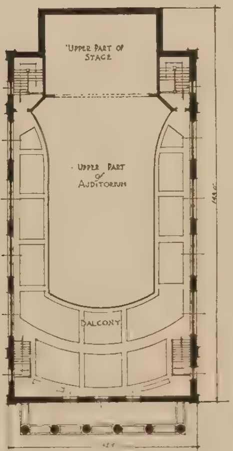
Childs & Smith, Architects.

LAWRENCE MEMORIAL CHAPEL, LAWRENCE COLLEGE, APPLETON, WIS.



AUDITORIUM.

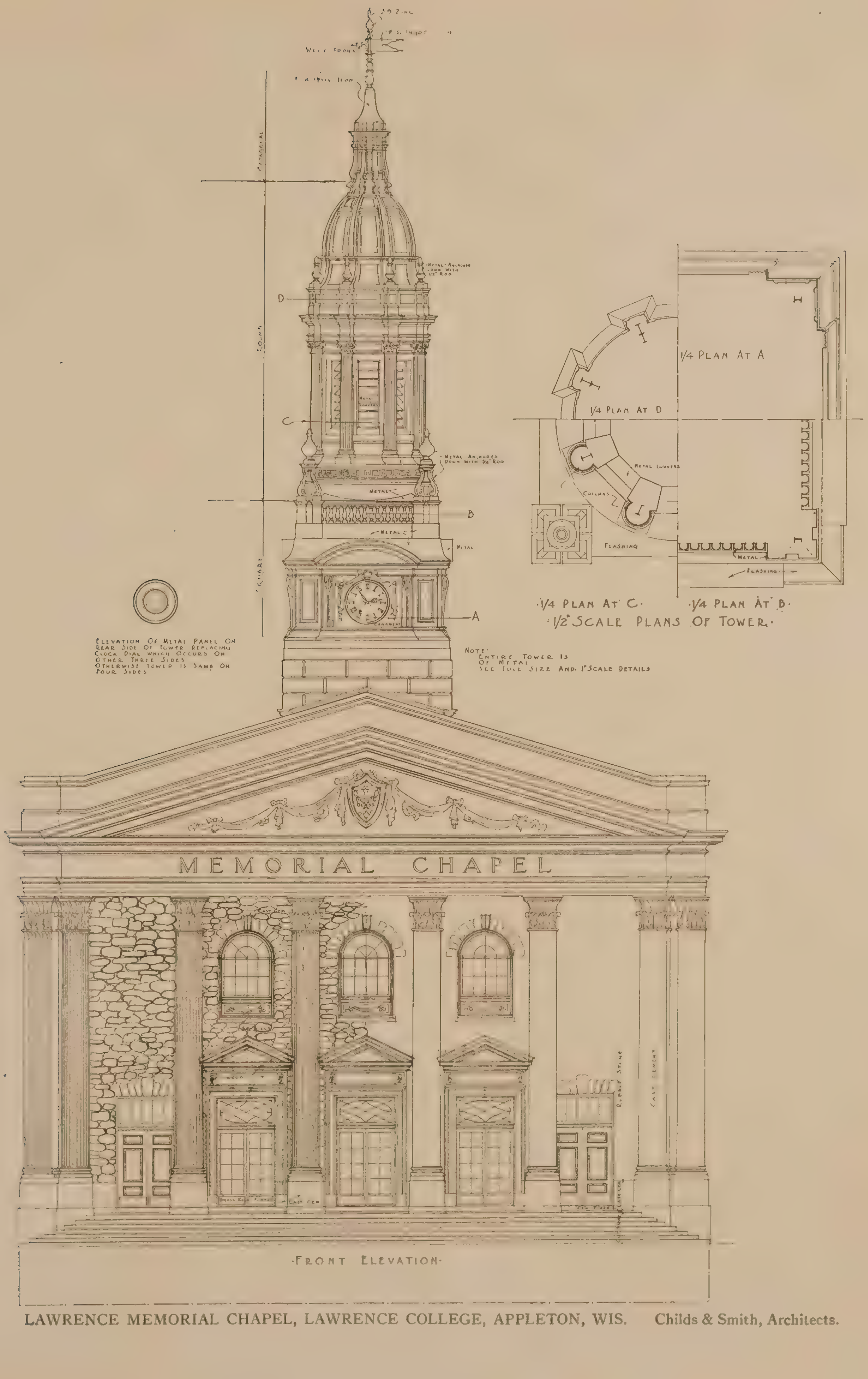




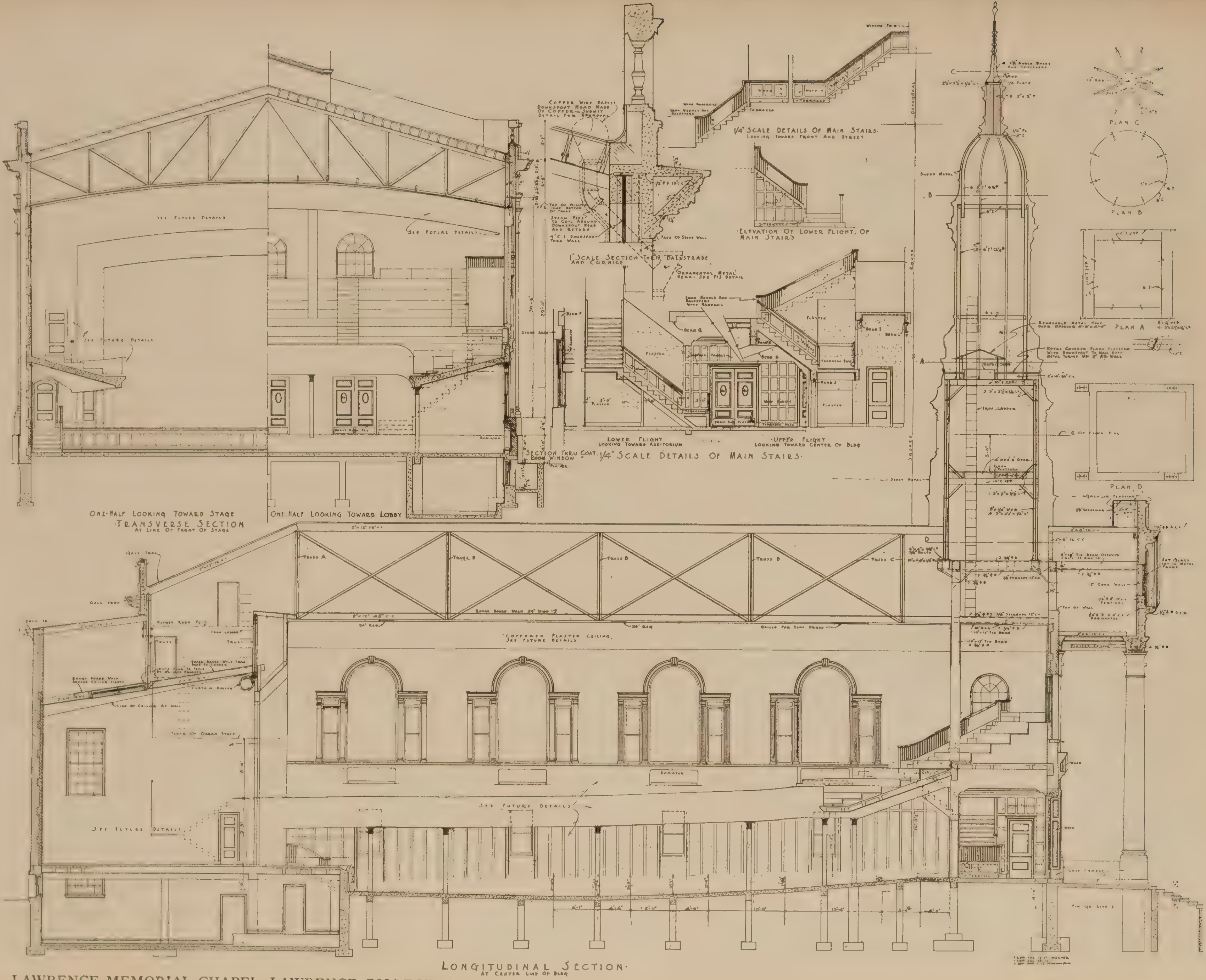
PLANS.

Childs & Smith, Architects.

LAWRENCE MEMORIAL CHAPEL, LAWRENCE COLLEGE, APPLETON, WIS.


Zinc
Wells Iron
Metal Anchored Down With 1/2" Rod
D
C
Metal Louvers
Metal Anchored Down With 3/4" Rod
Metal
B
Metal
Square
A
Ornament
Elevation Of Metal Panel On Rear Side Of Tower Replacing Clock Dial Which Occurs On Other Three Sides Otherwise Tower Is Same On Four Sides
Note: Entire Tower Is Of Metal See Full Size And 1" Scale Details
1/4 Plan At A
1/4 Plan At D
Metal Louvers
Columns
Flashing
Metal
Flashing
·1/4 Plan At C·
·1/4 Plan At B·
·1/2" Scale Plans Of Tower·
MEMORIAL CHAPEL
Rubble Stone
Cast Cement
·Front Elevation·

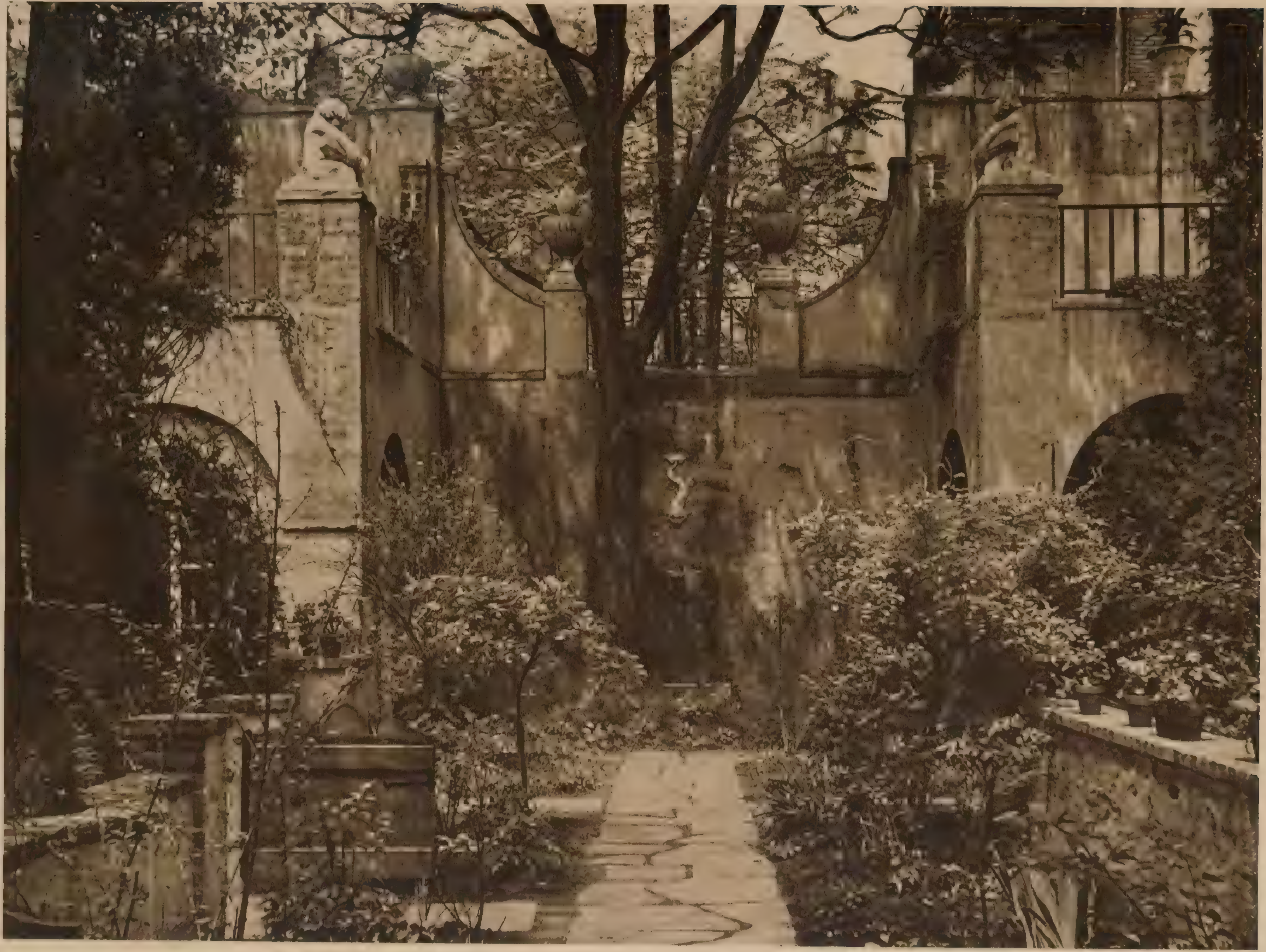
LAWRENCE MEMORIAL CHAPEL, LAWRENCE COLLEGE, APPLETON, WIS. Childs & Smith, Architects.



One-Half Looking Toward Stage
Transverse Section
At Line of Front of Stage
One Half Looking Toward Lobby
Section Thru Coat Room Window
1" Scale Section thru Balustrade and Cornice
1/4" Scale Details of Main Stairs
Looking Toward Front and Street
Elevation of Lower Flight of Main Stairs
Lower Flight
Looking Toward Auditorium
Upper Flight
Looking Toward Center of Bldg
1/4" Scale Details of Main Stairs
Plan A
Plan B
Plan C
Plan D
Truss A
Truss B
Truss C
Coffered Plaster Ceiling
See Future Details
Radiator
Longitudinal Section
At Center Line of Bldg

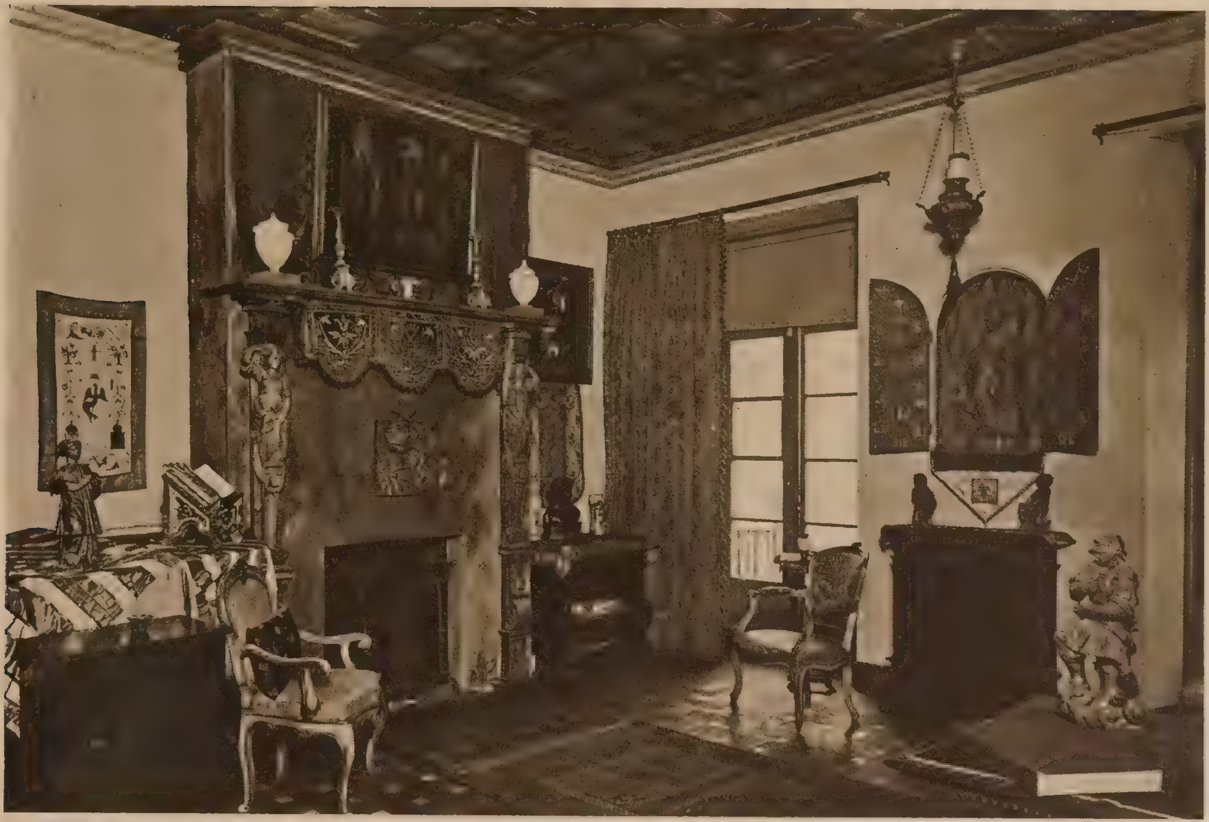
LAWRENCE MEMORIAL CHAPEL, LAWRENCE COLLEGE, APPLETON, WIS.

Childs & Smith, Architects.

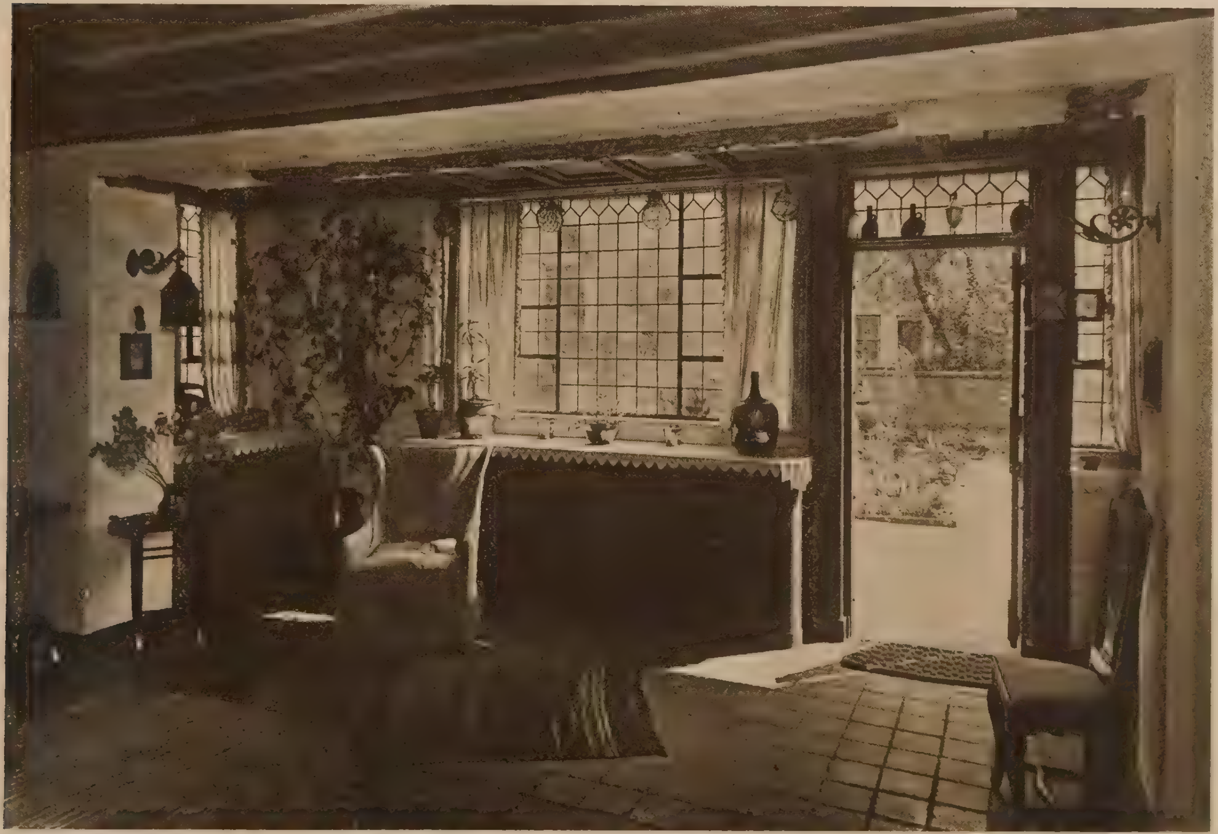


THE END OF THE GARDEN ALTERATIONS, TURTLE BAY, NEW YORK CITY.

Edward C. Dean, William Lawrence Bottomley, Associated Architects.



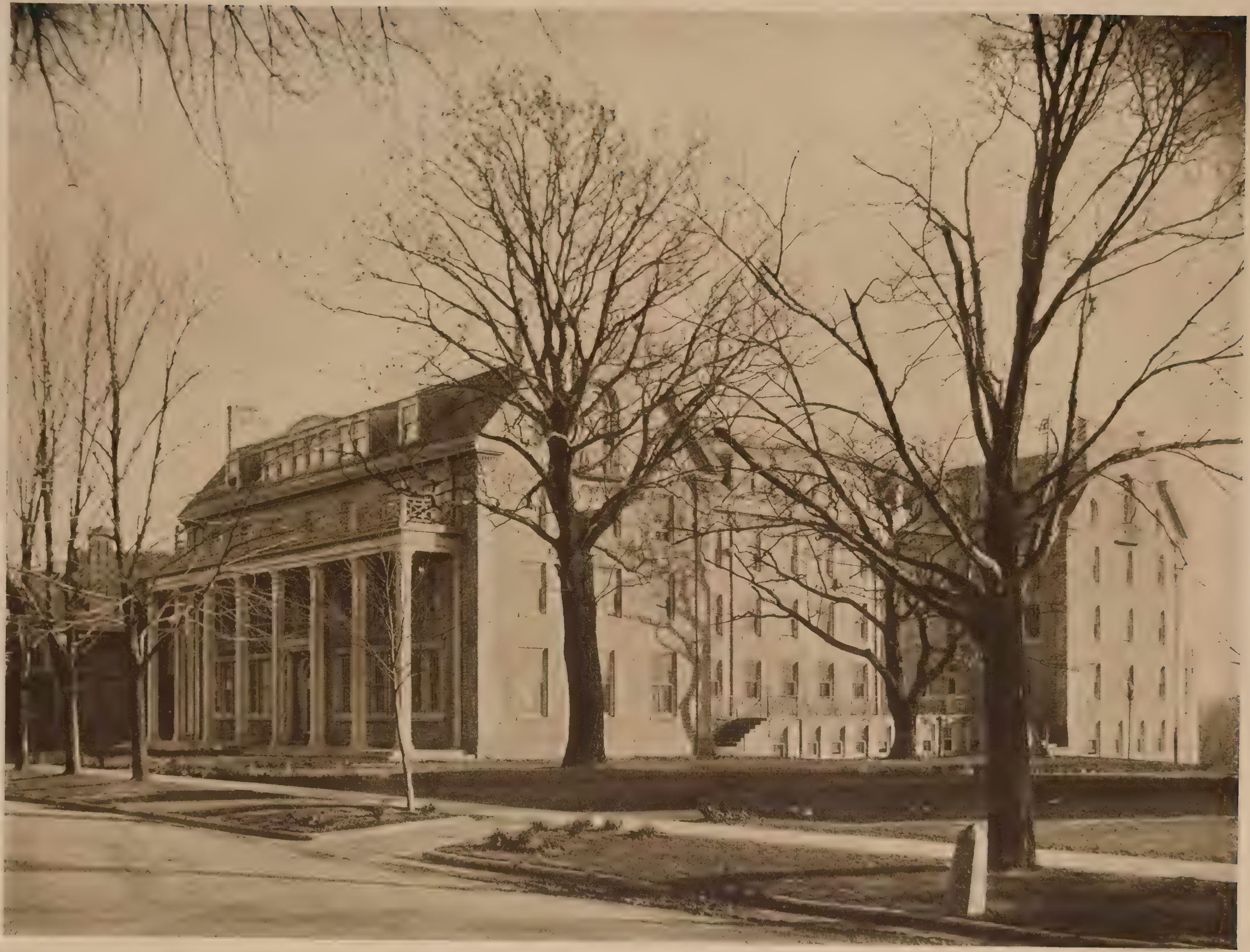
LIVING-ROOM, RESIDENCE, E. C. DEAN.



DINING-ROOM, RESIDENCE, E. C. DEAN.

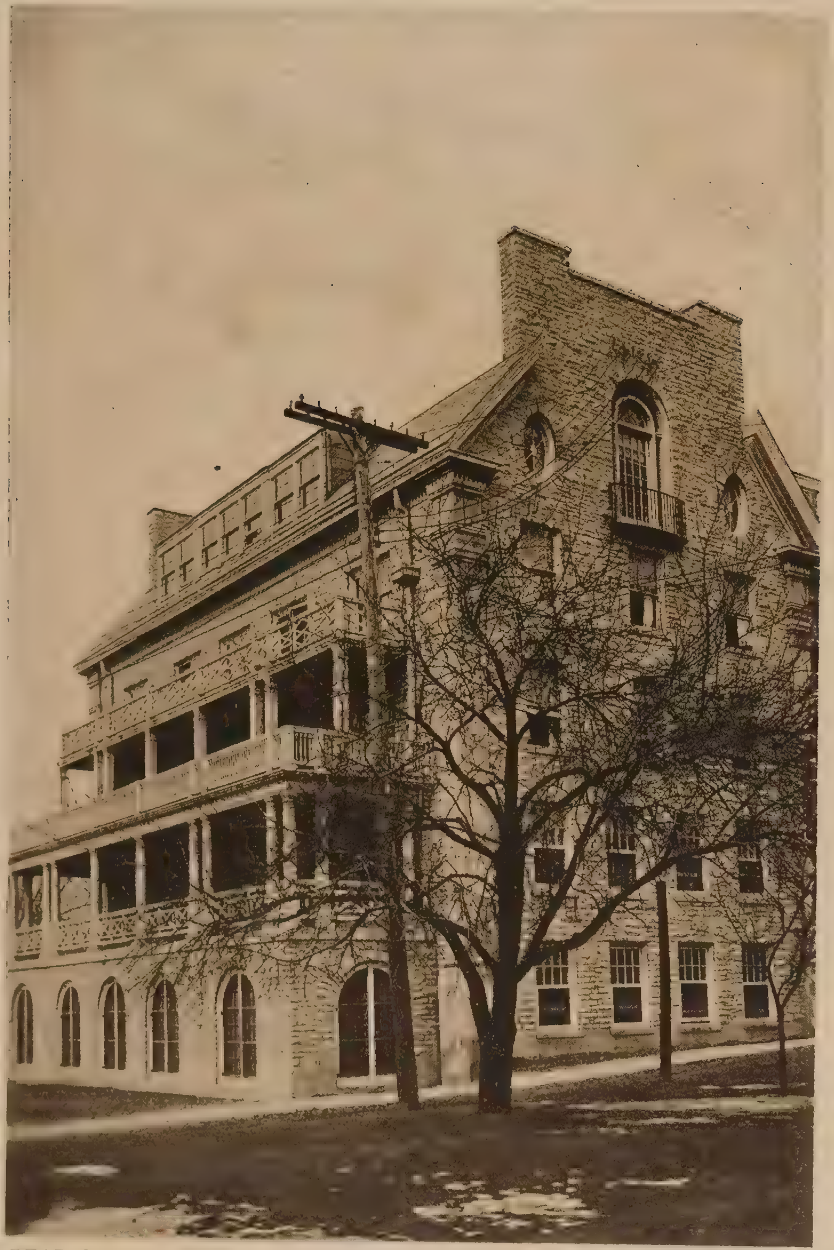
Edward C. Dean, Architect.

ALTERATIONS, TURTLE BAY, NEW YORK CITY.

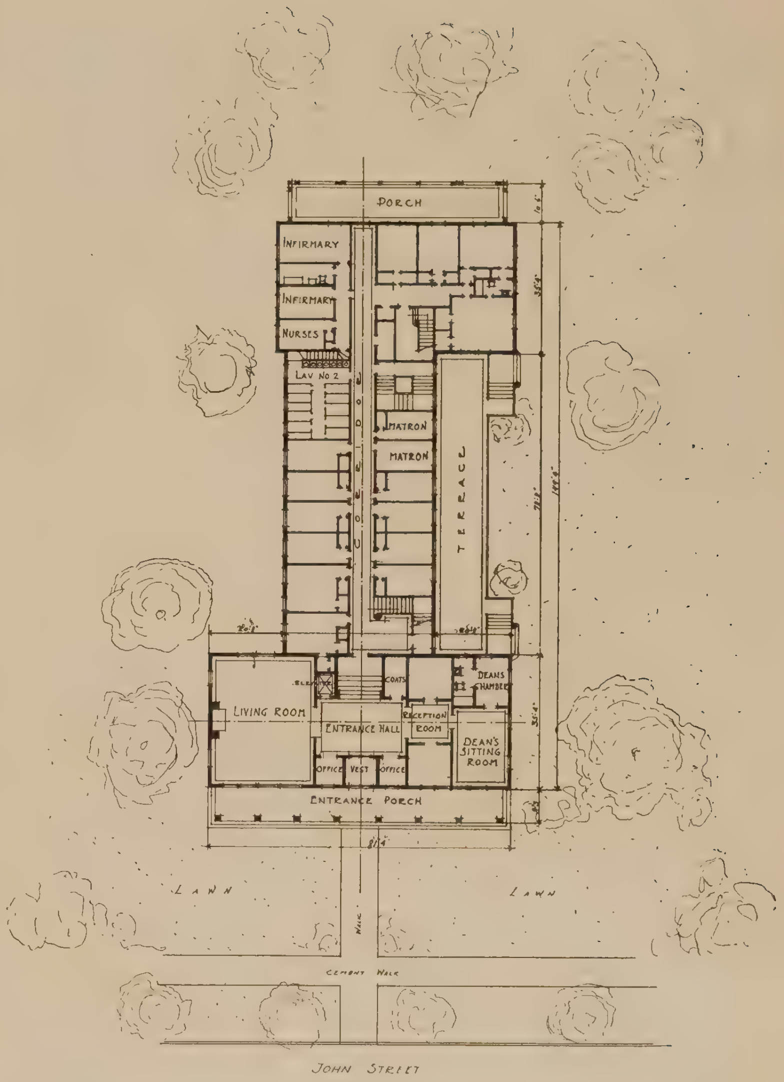


RUSSELL SAGE DORMITORY, LAWRENCE COLLEGE, APPLETON, WIS.

Childs & Smith, Architects.

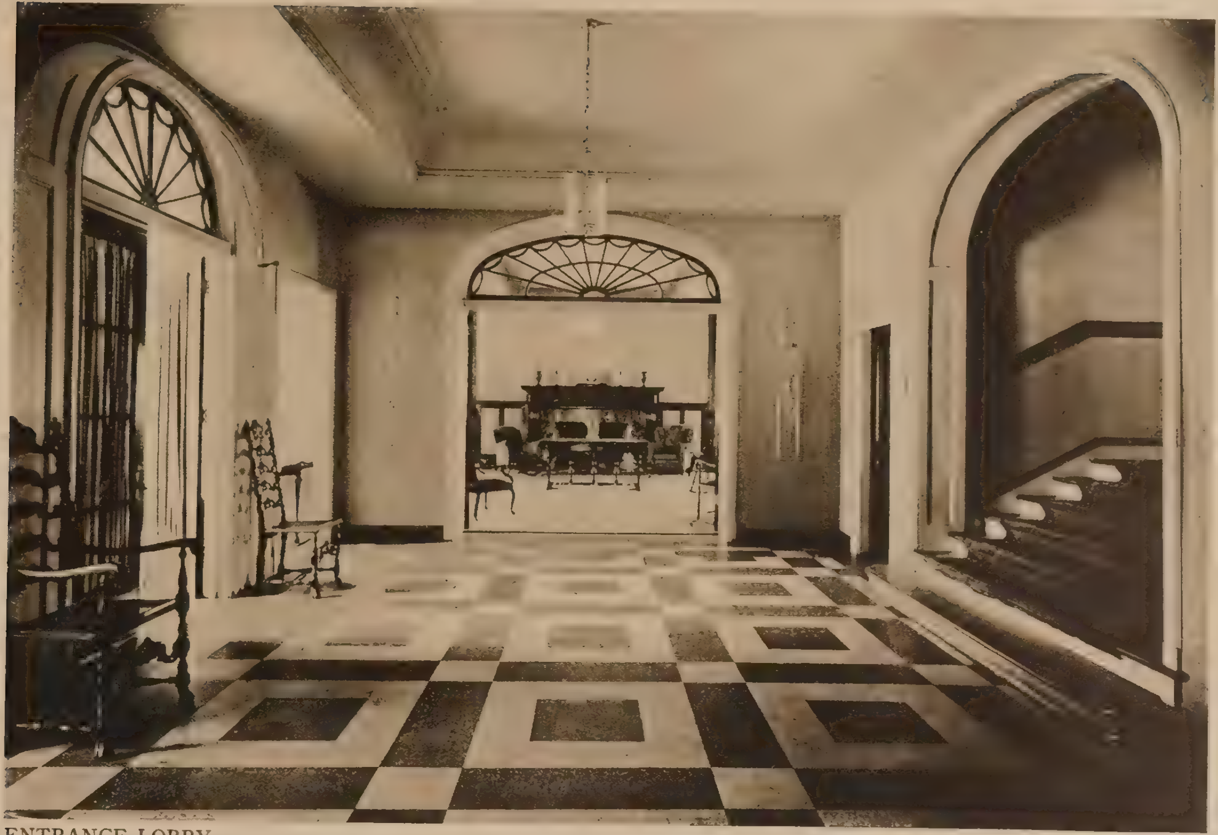


REAR OF RUSSELL SAGE DORMITORY, LAWRENCE COLLEGE, APPLETON, WIS.

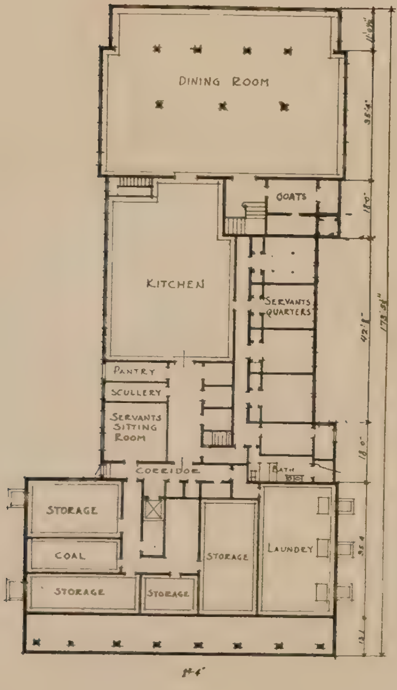


FIRST FLOOR PLAN

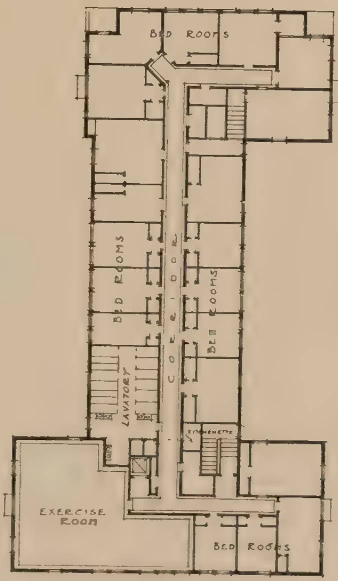
Childs & Smith, Architects.



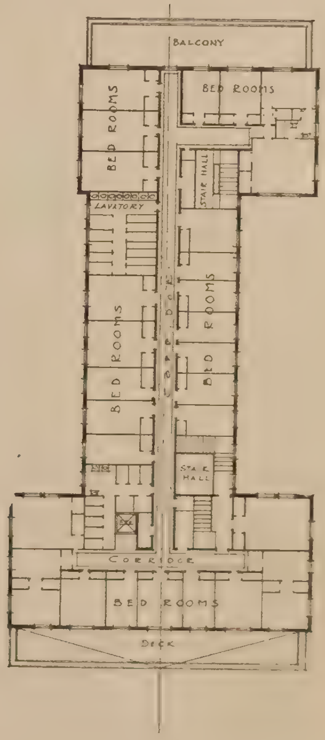
ENTRANCE-LOBBY.



BASEMENT PLAN



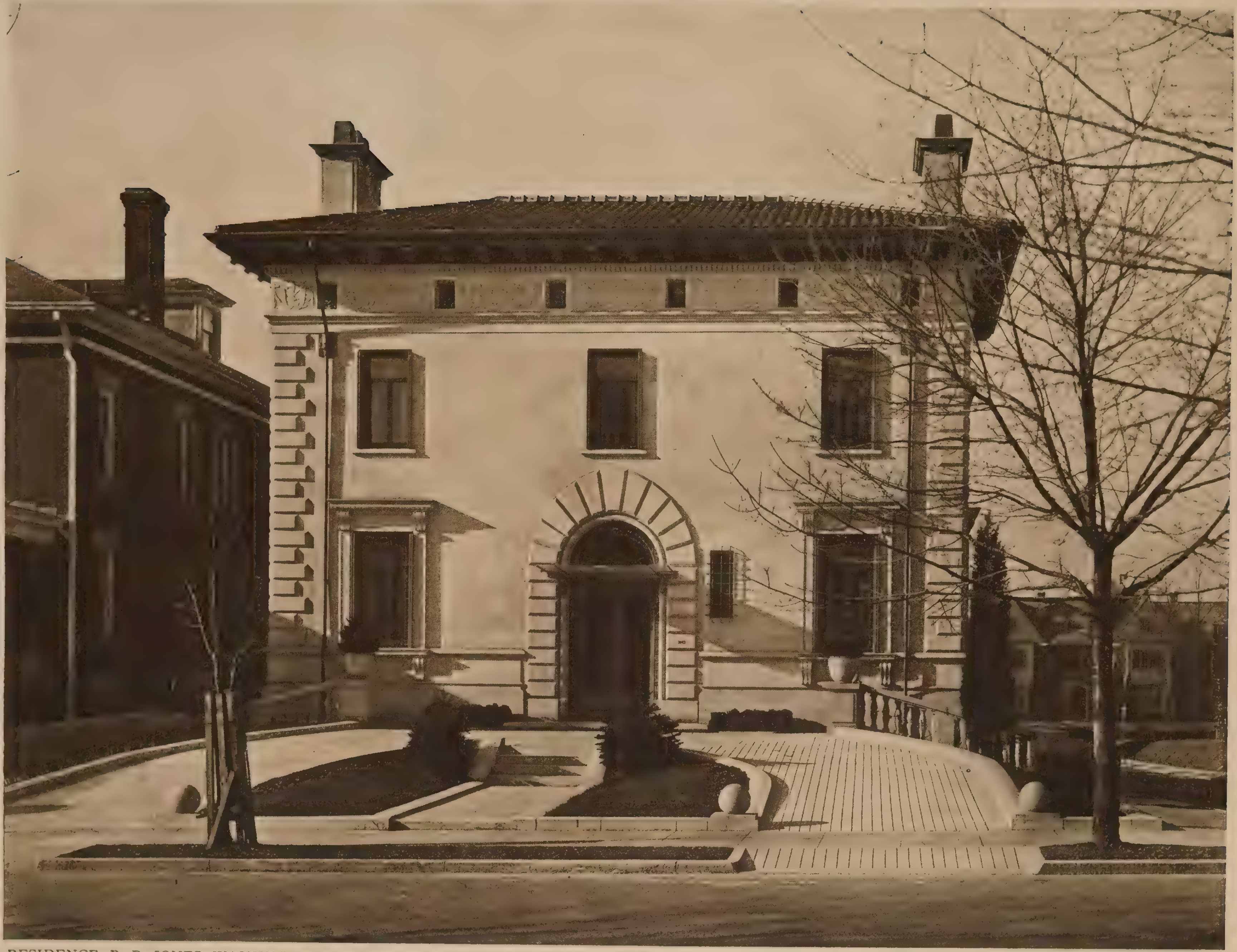
ATTIC PLAN



TYPICAL FLOOR PLAN

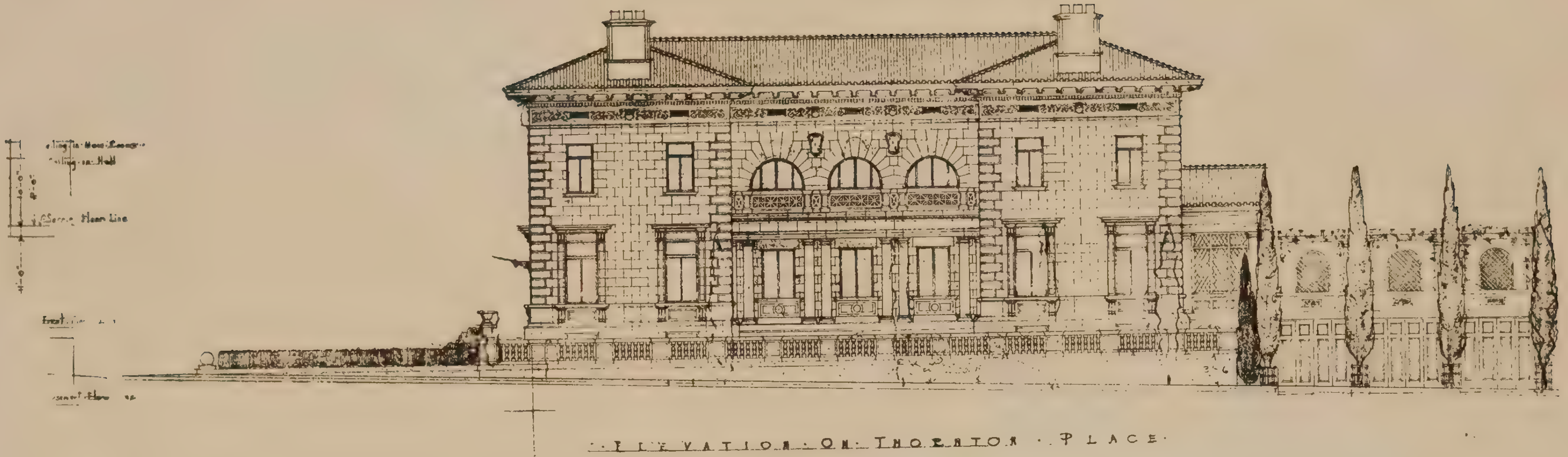
RUSSELL SAGE DORMITORY, LAWRENCE COLLEGE, APPLETON, WIS.

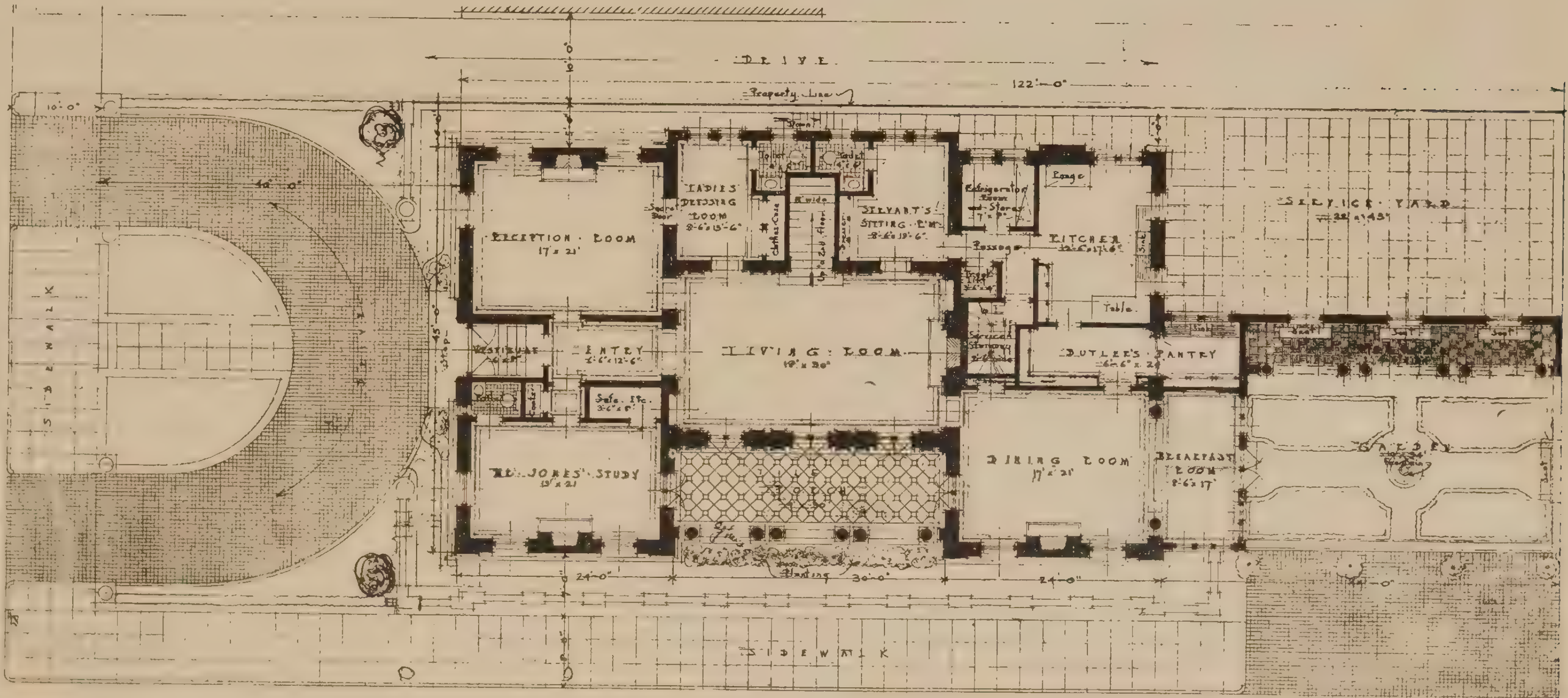
Childs & Smith, Architects.



RESIDENCE, B. B. JONES, WASHINGTON, D. C.

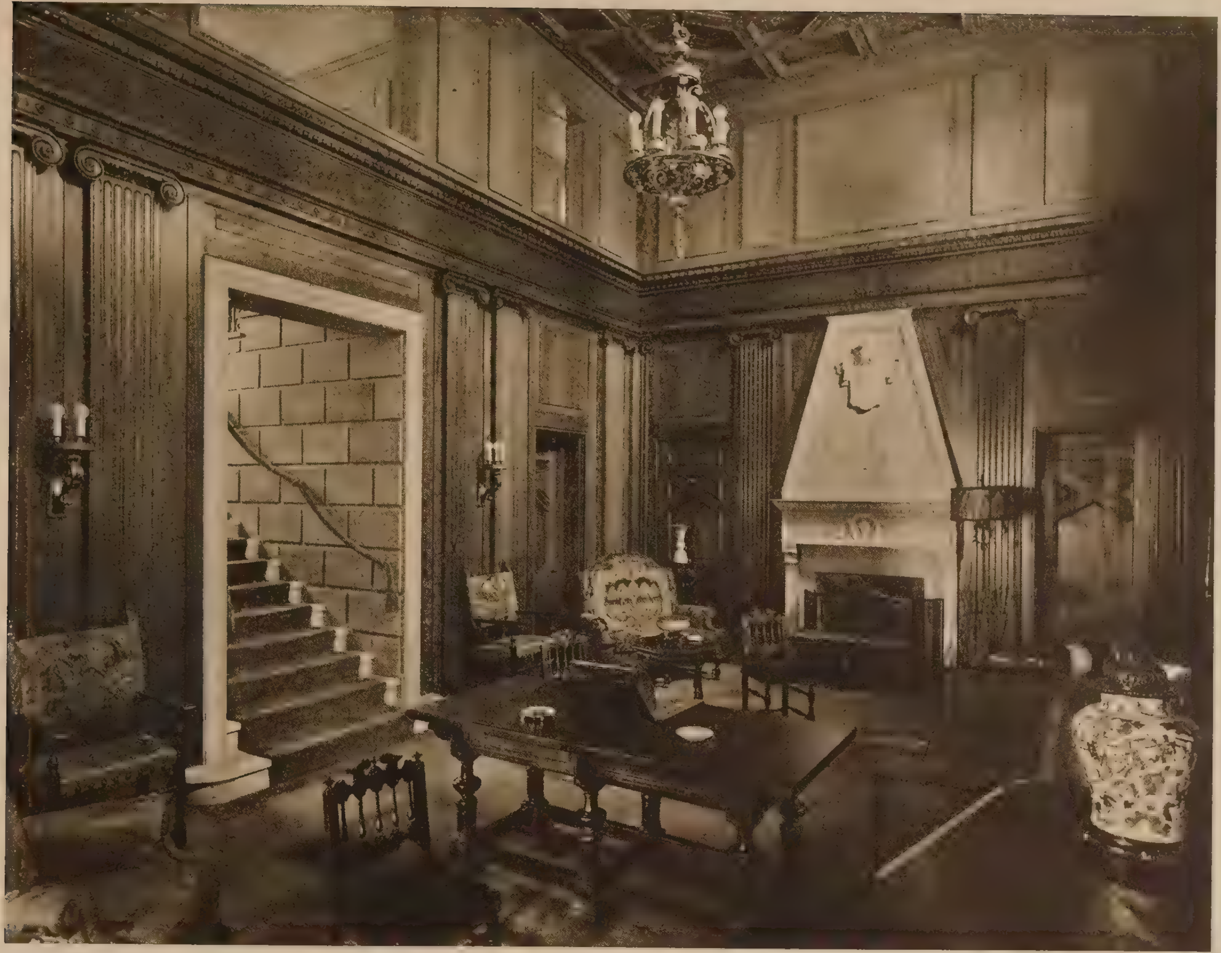
Waddy B. Wood, Architect.



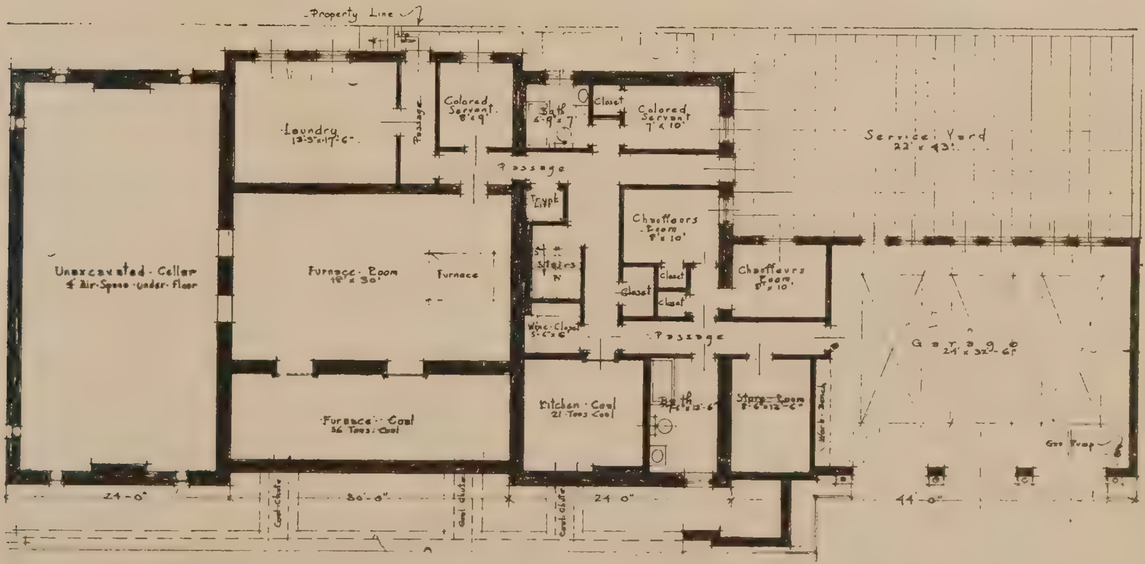


GROUND-FLOOR PLAN, RESIDENCE, B. B. JONES, WASHINGTON, D. C.

Waddy B. Wood, Architect.



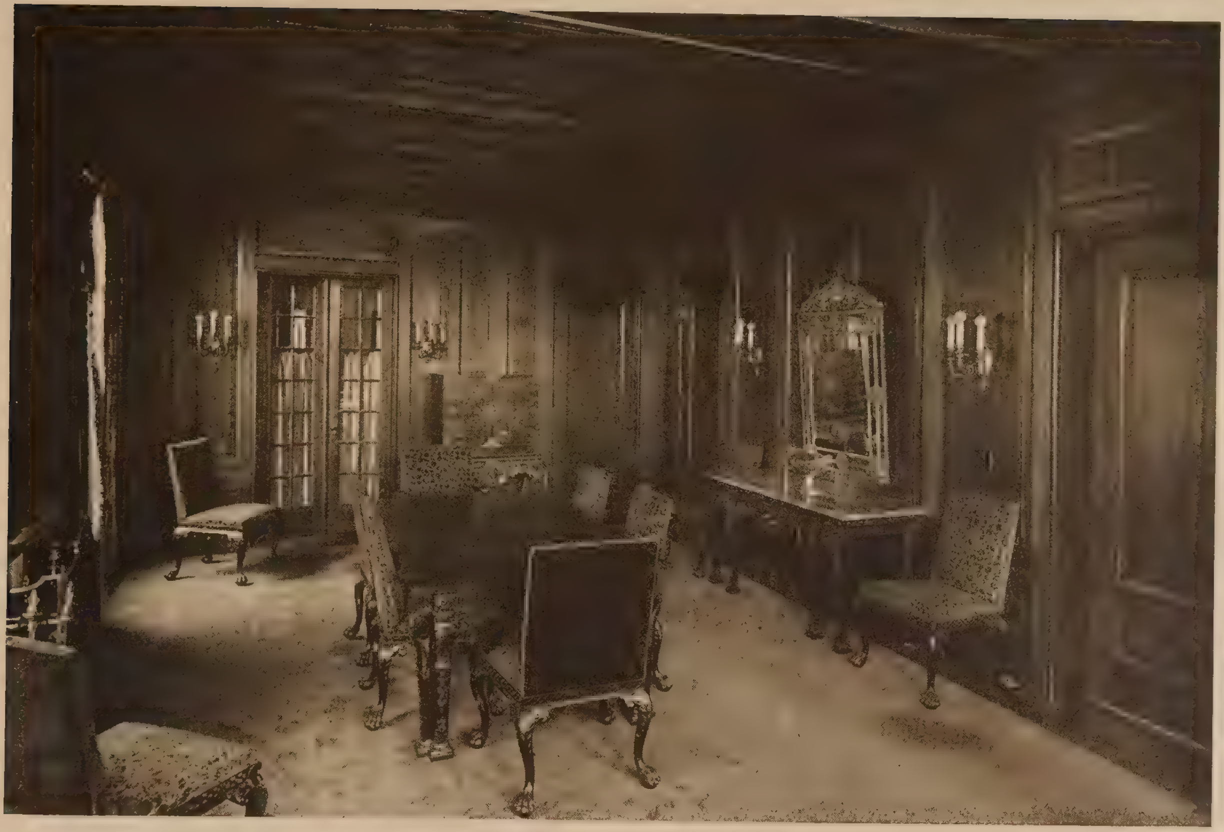
LIVING-ROOM.

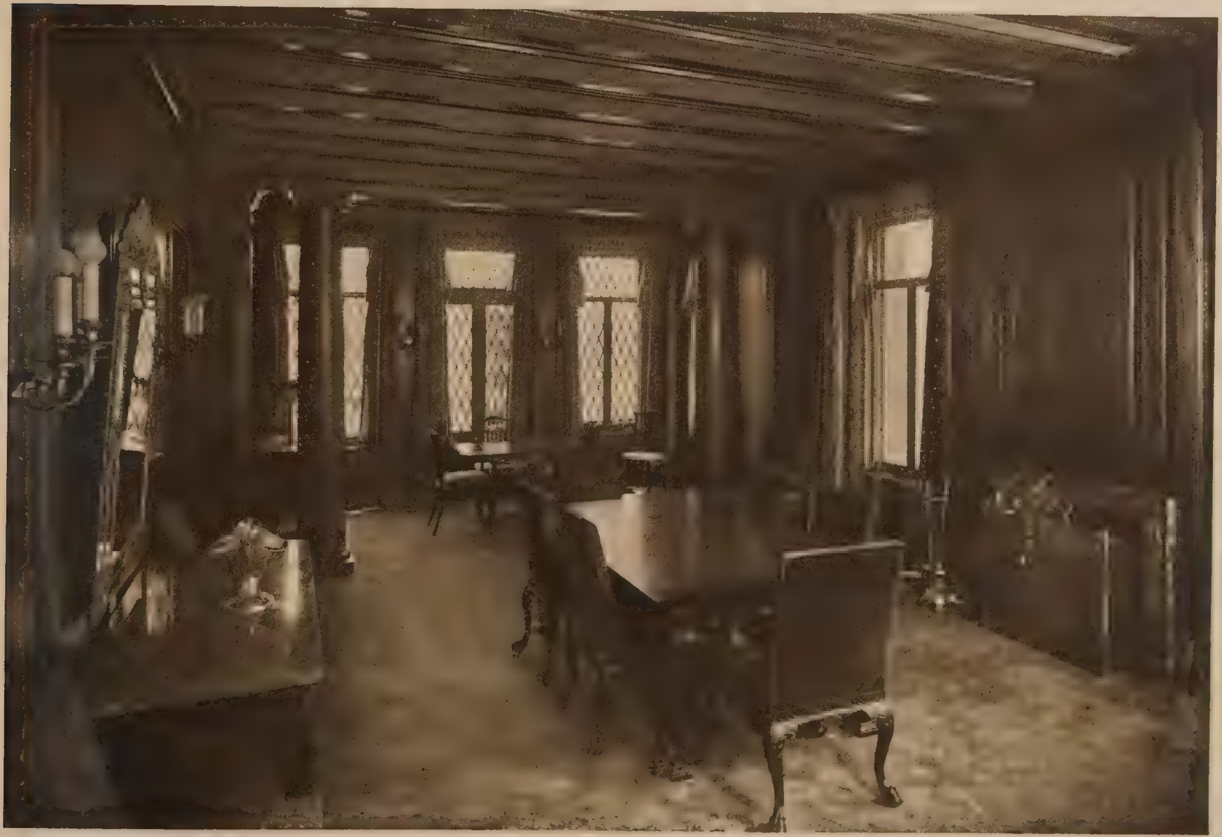


BASEMENT PLAN, GARAGE, ETC.

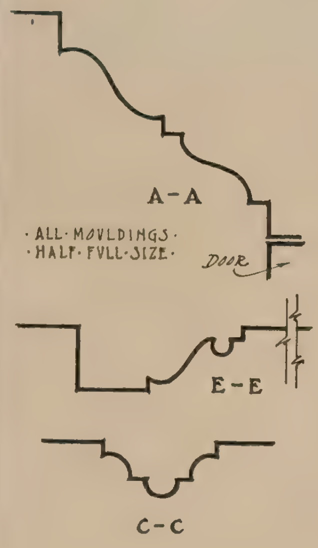
Waddy B. Wood, Architect

RESIDENCE, B. B. JONES, WASHINGTON, D. C.

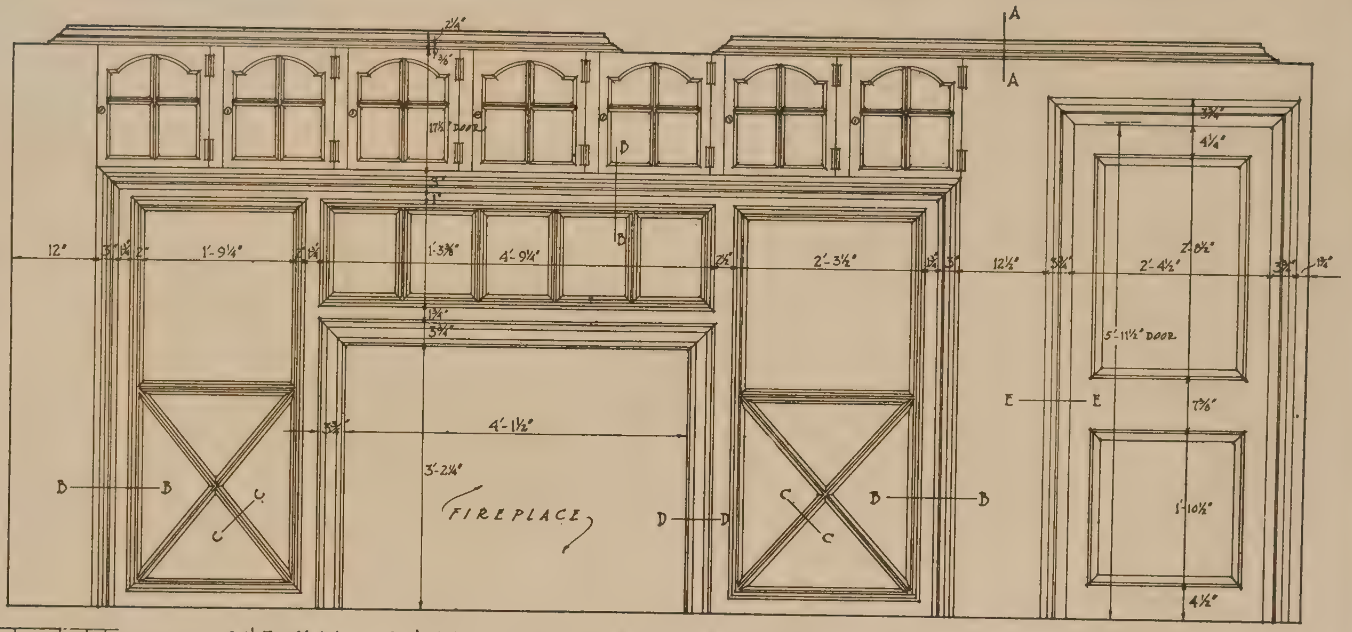




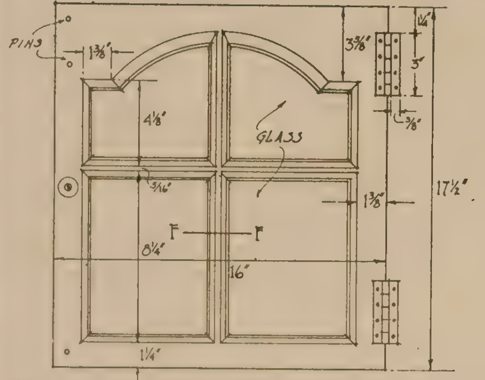
DINING-ROOM, RESIDENCE, B. B. JONES, WASHINGTON, D. C. Waddy B. Wood, Architect.



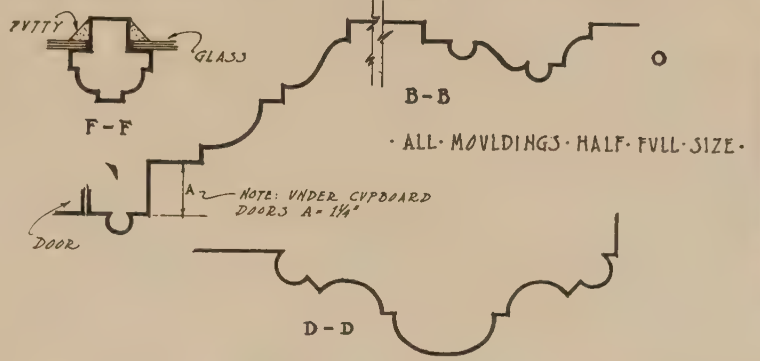
·ALL·MOULDINGS·
·HALF·FULL·SIZE·



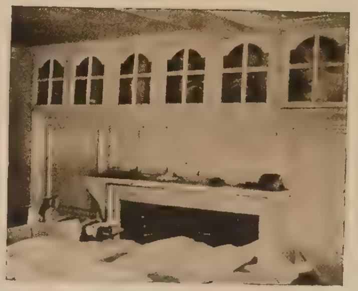
·ONE-HALF·INCH·SCALE·ELEVATION·



·1½"·SCALE·DETAIL·of·CUPBOARD·DOORS·



·ALL·MOULDINGS·HALF·FULL·SIZE·

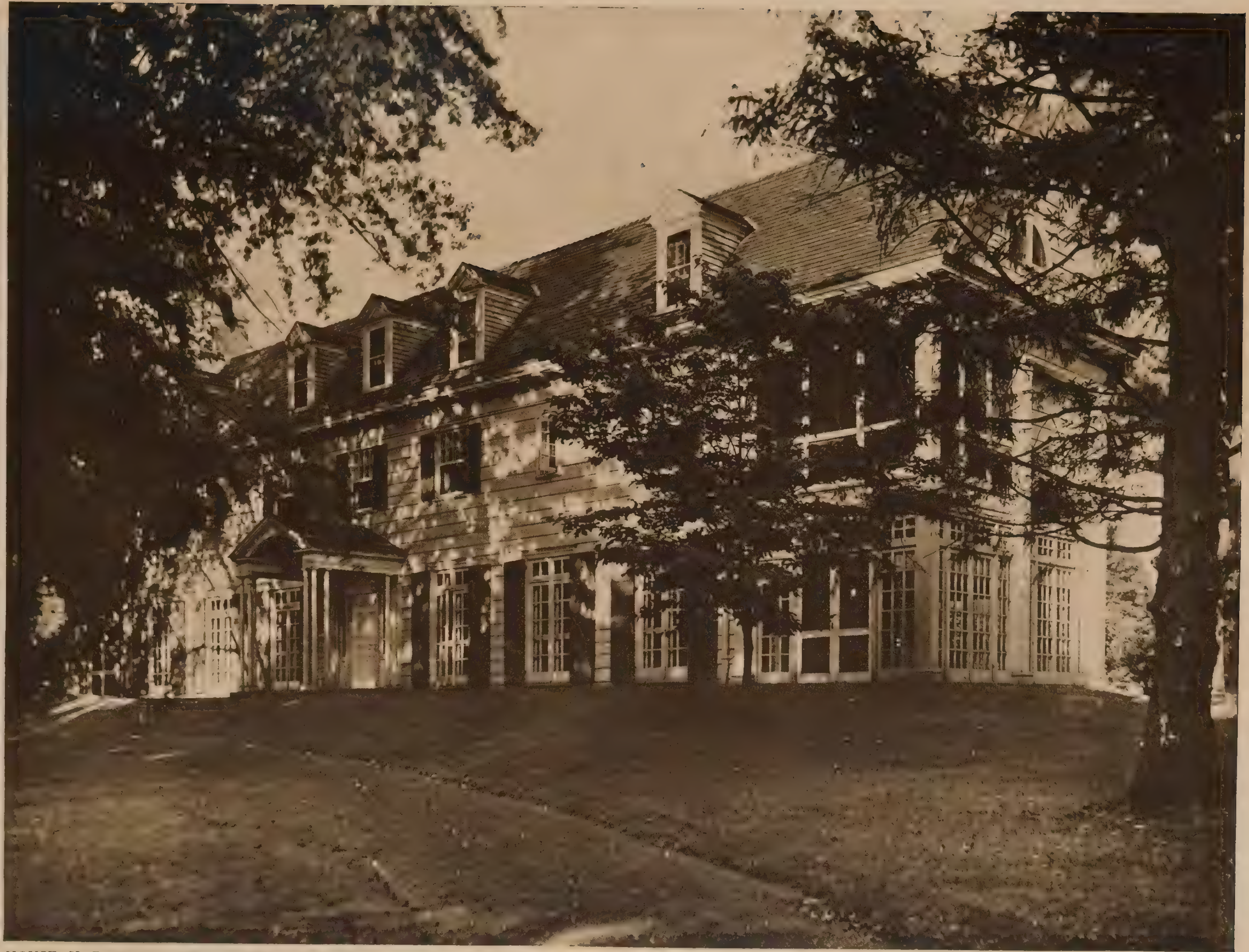


NOTE:
THE SHELF SHOWN IN PHOTO
IS A LATER ADDITION.

·EARLY·
·ARCHITECTURE·
·OF·
·CONNECTICUT·

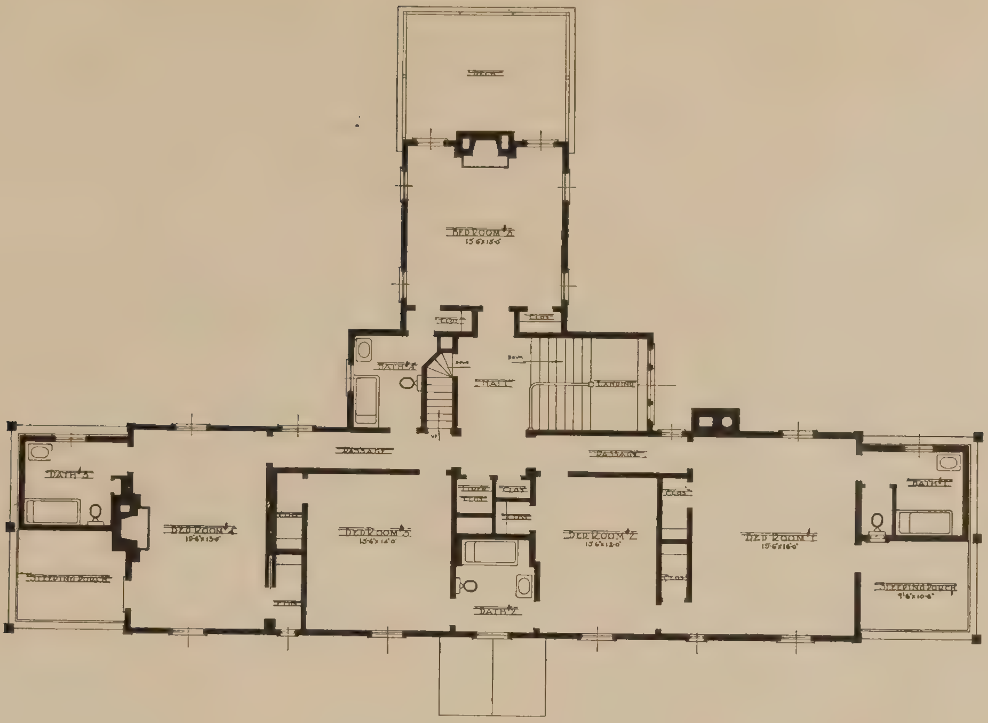
·PANELLING·IN·TAP-ROOM·of·
·Ye·OLDE·PHELPS·TAVERN·(Date 1771)·
·SIMSBURY·CONN·

·MEASURED·BY·
·J·FREDERICK·KELLY·
·DRAWN·BY·
·LORENZO·HAMILTON·

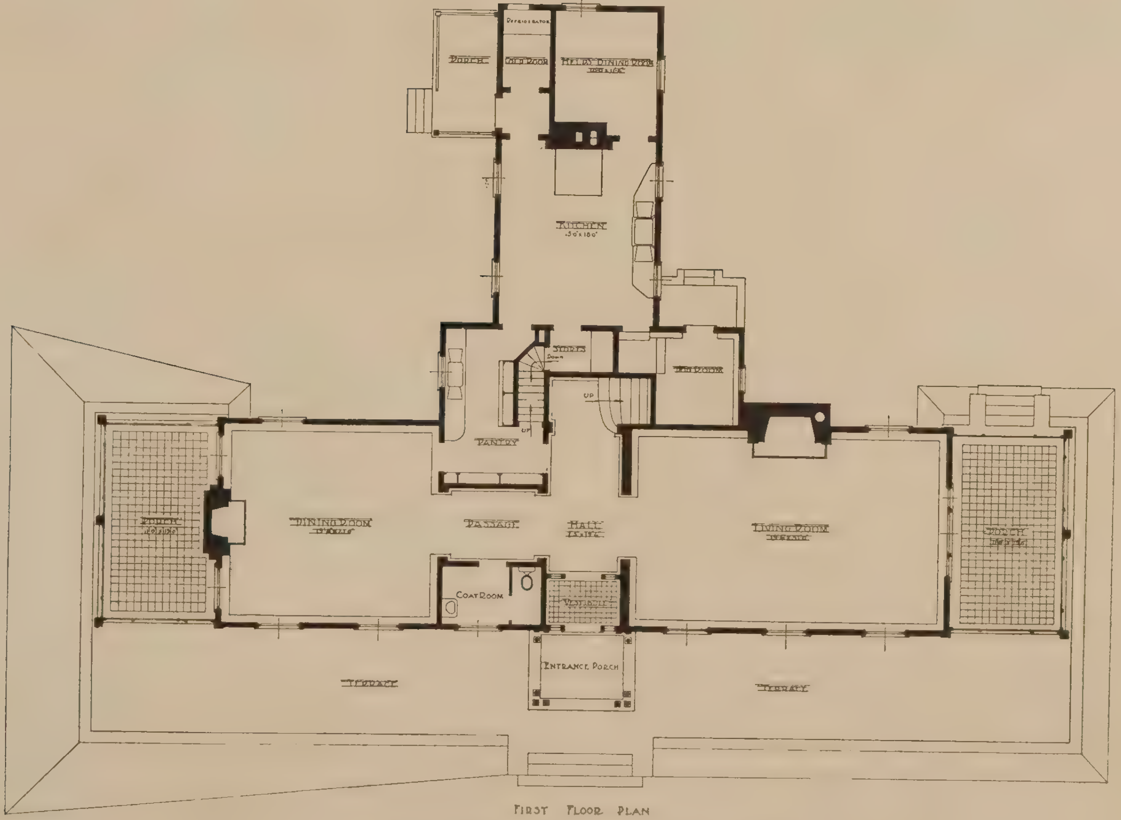


HOUSE, H. B. TREMAINE, ALLENDALE, N. J.

Lucian E. Smith, Architect.



SECOND FLOOR PLAN



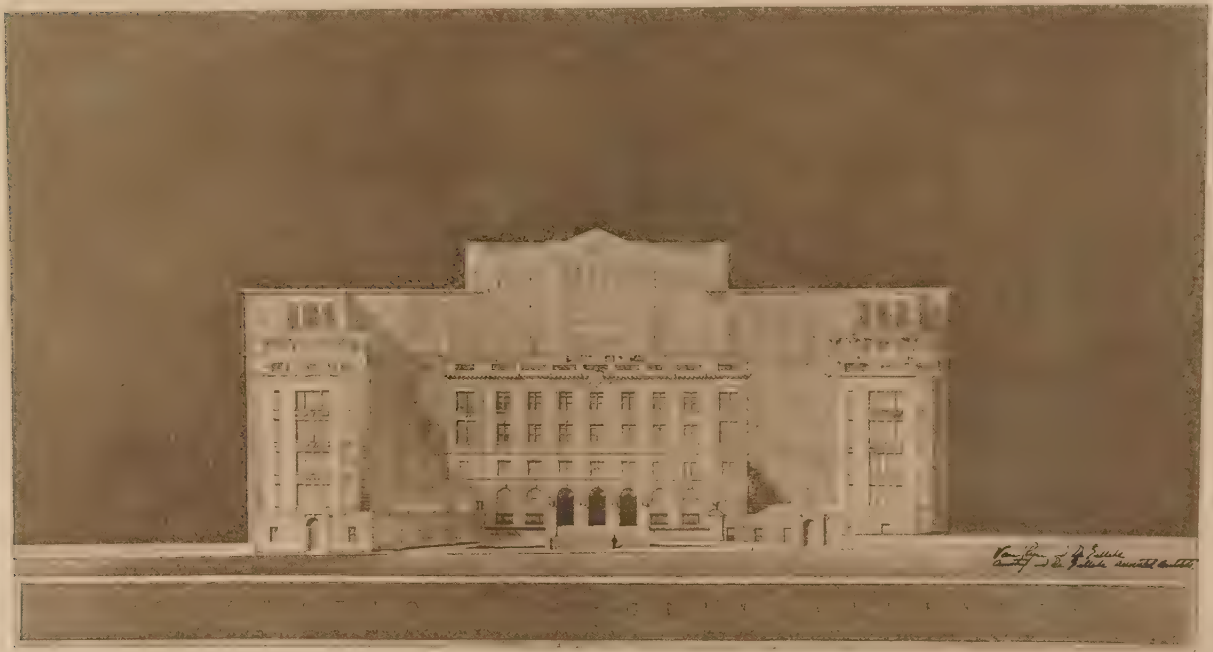
FIRST FLOOR PLAN

·HOUSE·OF·H·B·TREMAINE·ESQ. ON·FRANKLIN·TURNPIKE·
·ALLENDALE·N·J·
LUCIAN E. SMITH ARCHITECT No 2 W 47th ST NYC

Competition for Milwaukee County General Hospital

Including Nurses' Home, Laboratory Building, Power-House, Garage, and Laundry

Van Ryn and De Gelleke, Armstrong and De Gelleke, Associated Architects



MAIN hospital building is to be planned to take care of 515 beds, with a view to future extension to take care of an additional 500 beds. The following departments in this building must be planned at once so that they are of sufficient size to take care of a 1,000-bed hospital: administration department, operating department, culinary and dining-room department, and check-room.

Nurses' home is to be planned to accommodate 100 pupil nurses and 36 graduate nurses, with a view to future extension to take care of double this number of pupil and graduate nurses. The large sitting-room or amusement-hall on first floor, toilet accommodations, gymnasium, swimming-pool, private laundry, and trunk-room are to be planned at once to accommodate the additional nurses.

The power-house and laundry are to be planned at once to take care of a 1,000-bed hospital.

Jury of Award

The owner agrees that there will be a jury of award consisting of nine (9) members as follows: 3 architects, selected from names as suggested by the Wisconsin chapter, A. I. A.; 1 physician, 1 surgeon, 1 superintendent of nurses, the chairman of the county board, 1 member of the board of administration, and 1 other member of the county board. The personnel of the jury of award shall be as follows: architects, Arthur Peabody, A. I. A.; Elmer Jensen, A. I. A.; Irving Pond, A. I. A.; physician, surgeon, and superintendent of nurses not yet selected; board of administration, William L. Coffey; chairman of county board and 1 other member of county board to be selected.

Compensation to Competitors

The owner agrees to pay to the successful competitor, as determined by the jury of award, within twenty days after such determination, the said sum of $5,000, being the amount of the first prize in said competition. If said competitor is selected as architect of the building, the said sum shall be considered as part payment of his total fee. In case of delay in building operations on the part of the owner, such delay shall not rescind any former action of the owner as to the selection and future employment of the architect to whom the work has been awarded.

In full discharge of his obligations to them the owner agrees:

To pay the following prices to those ranked next to the successful design: to the design placed second, $1,500; to the design placed third, $1,200; to the design placed fourth, $1,000; to the design placed fifth, $750, within ten days of the judgment.

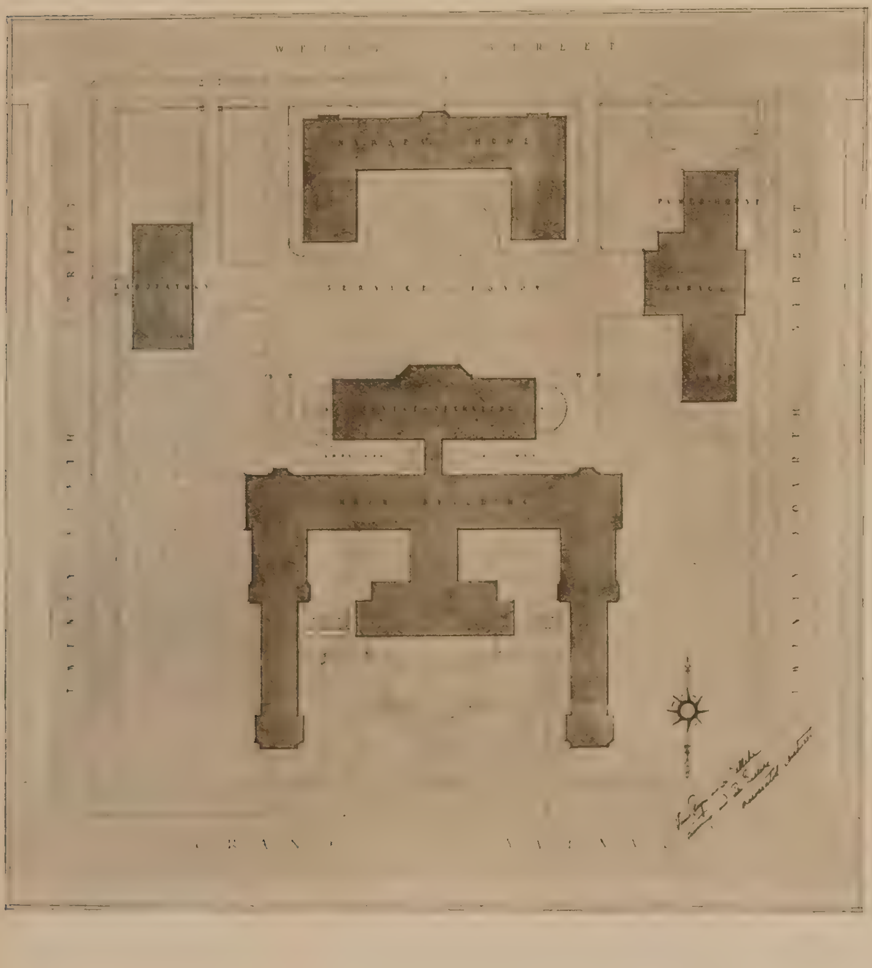
Requirements of the Buildings

The buildings are to be built of good available materials in accordance with good practice, with a view to rigid economy consistent with good lighting, ventilating, sanitation, and good taste.

A compact design is desired.

The exterior should be a combination of brick and stone, or brick and terra-cotta, or a combination of the three. Sheet-metal or wood exterior architectural treatment will not be acceptable. The entire buildings should be fireproof and corridors should be made as noiseless and soundproof as possible.

DESIGN FOR MILWAUKEE COUNTY GENERAL HOSPITAL.



List of Departments of Buildings to Accommodate 515 Beds

Medical; Surgical; Maternity; Pediatrics, Orthopedics; Eye, Ear, Nose, and Throat; Genito-Urinary; Psychopathic; Nurses—Indisposed; Doctors—Indisposed; Administration Department, first floor, central wing; Operating Department, fourth floor, rear wing; Out-Patient Department, ground floor; Psychopathic Out-Patient Department, ground floor; Culinary Department, unit on ground floor, and kitchen, basement, and first floor, rear wing; Dining-room Department, second and third floors; Isolation Department, eighth floor.

Tunnel

A tunnel of sufficient size and conveniently located is to be provided for, to connect the main hospital building with the laboratory building and the building containing power-house, garage, laundry, and workshop.

The Jury made the following awards:

1st—Van Ryn and De Gelleke, Milwaukee, Wis., Armstrong and De Gelleke, New York, Associated Architects. 2d—Schmidt, Garden & Martin, Chicago. 3d—Eric Gugler, New York. 4th—Clare C. Hosmer, Chicago, William H. Furst & R. G. Wolff, Associated Architects. 5th—Robert Messmer's Sons, Milwaukee, Wis.

Town Planning for Convenience and Health

By Louis Lott

THERE is not a community in the United States that cannot, by scientific analysis of the problems contained within its city plan and in its industrial and commercial expansion, so regulate its future developments and improvements that these will prove permanent assets. Problems definitely and well solved, by taking them up in the order of their importance, gradually work toward the definite goal of an orderly, beautiful community.

A comprehensive town plan co-ordinates all of the diversified interests and activities within a community, both public and private. It provides for adequate street traffic, transportation, and safety. It groups all business and other activities of a kind in given districts. It protects the home and private property from depreciations. It provides for parks, boulevards, playgrounds, and play-fields, and for school and building sites. It also provides for city extension and increased population, and protects a community from such losses and shortcomings as were caused by the lack of such a plan in the past. It furthermore does away with duplication of public and private efforts and waste, provides for maximum, intensive use of all community facilities, serves as a common tie of all interests, as a guide to public officials and private investors, and finally establishes definite objectives and goals. Thereby it co-ordinates all efforts toward a better, more healthful, more prosperous, and more attractive-looking community, creates order where there is chaos, and in the end will make as smooth-working a machine of the physical city as it is possible to make, for, being comprehensive, it takes all features and questions of the community into consideration, according to their degree of importance, and harmonizes them with each other. The plan beomes homogeneous and lop-sided development is avoided.

In this manner the industries of a community, for example, will receive the utmost assistance, for such features as docks, streets, traffic, railroads, etc., that have a bearing upon them, as well as the transportation, housing, and recreational facilities for their employees are studied: not only in relation to the community as a whole, but also to those industries, so as to enable them to reduce their overhead expenses to a minimum and thereby effectively compete in the world's markets. It must be borne in mind that if physical defects in the city plan prevent such industries from doing their business in the most economical and efficient manner, or if the lack of housing, or the quality of the same, etc., handicap such firms in procuring adequate help of the best quality, then all of this is not merely a matter that concerns these industries only, but it is also vital to the community as a whole, since its welfare and prosperity is more or less dependent upon the welfare and prosperity of its industries and commercial activities.

It follows, therefore, that both public and private efforts must be correlated, and that there must be teamwork of the highest order that will work toward the greatest benefit for all, which can only be accomplished by having some definite plan to work by that will take care of all interests and secure their support and co-operation.

In these fast-changing times it is not wise to plan for more than about thirty years ahead, and then the plan should not be considered as an absolutely definite, immutable law, but as a sort of community constitution that, after due and deliberate consideration, is subject to amendments and changes when unforeseen conditions arise.

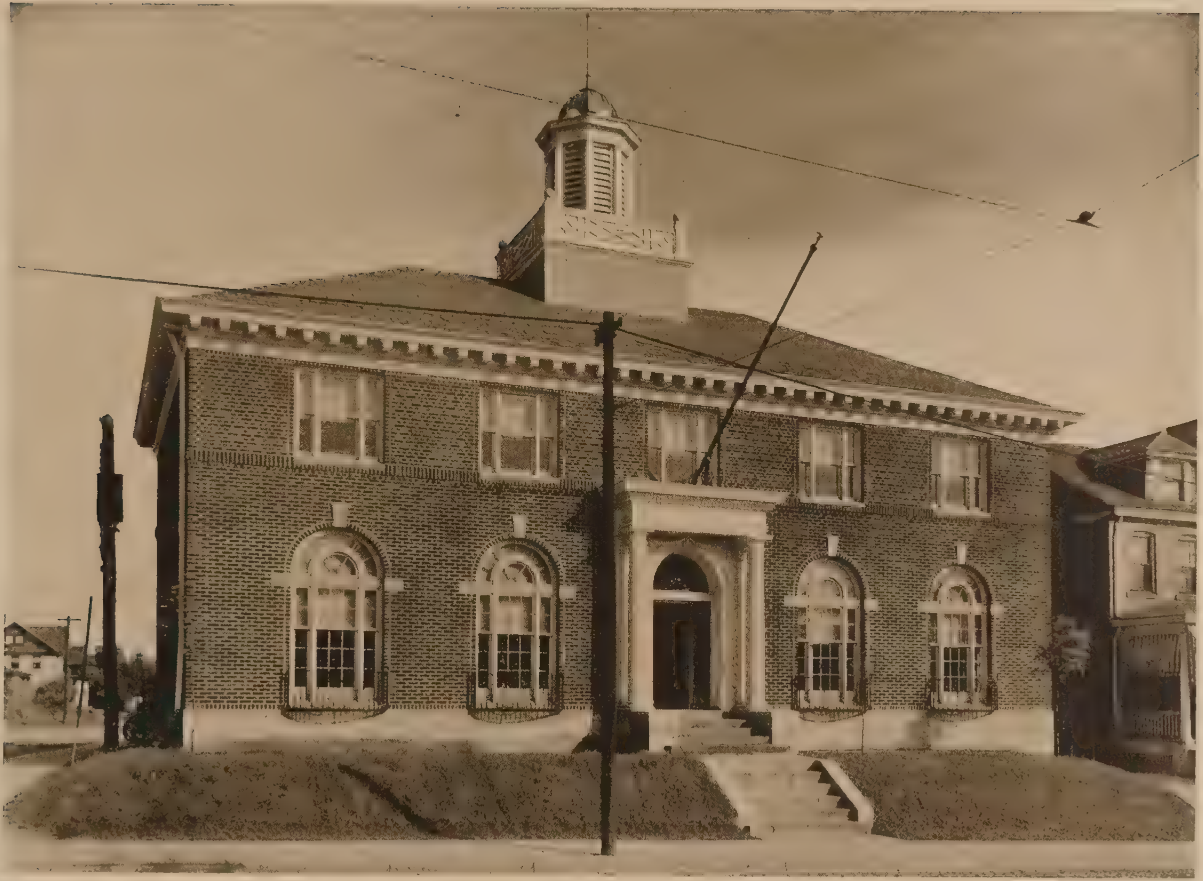
After the plan has been prepared, then follows the approximate computation of the cost of execution of the features of the plan, and upon this a budget is made; then, it being obvious that some things are more important and pressing than others, these are first undertaken and continued as fast as available funds will permit.

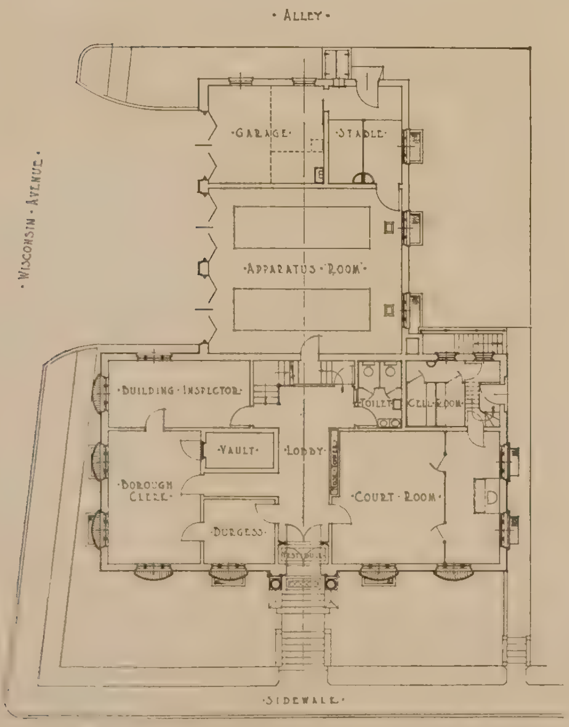
Some communities being more or less awake to their future possibilities, or having been forced into it by necessity, have in recent years, following the lead of European cities, undertaken to prepare corrective plans for some particular evil or for some immediate necessity. Some have a zoning plan, which is explained later; others have a park-and-boulevard plan, or a civic-centre plan, a railroad plan, a street-correction plan, or a city-extension plan, but only a few have to date undertaken a "comprehensive-development plan" that combines all of the above, and which embodies a complete analysis of a city's problems, both as regards its future needs and its immediate requirements. In some these improvements are steadily proceeding from year to year, according to their plan; in others little is being done, because there is no team-work, which is mostly due to the fact that the public was kept in ignorance while the plan was being prepared, and therefore there is no enthusiasm, co-operation, team-work. Consequently the public should be enlightened upon this subject, and, furthermore, be made to understand that comprehensive community development is not a matter of a spurt, "and have it over with"—our favorite way of doing things—but is a steady, determined, conscious effort for city improvement that goes on through generations, being practically a perpetual effort toward a definite end.

New York City is several times referred to in the course of this article, because this city furnishes the most striking town-planning examples for comparison that can be found. True, New York presents an abnormal, unique case, without a parallel, yet its conditions and the evils of its city plan pertain to a lesser degree to every community in this country. As an example, its surface traffic conditions have at this time reached a stage where they have gotten almost beyond control, in spite of all efforts of the authorities to regulate them, and will become worse and worse from year to year as the density of the population increases. This eternal jam, especially that within the down-town financial district, and also within the hotel and theatre districts, may fascinate the occasional visitor who remains a week or two, but as an every-day experience no perfectly sane person could term such conditions as normally healthy, or conducive to a maximum conservation and enjoyment of life and its bounties. New York may therefore serve as a warning to many of our smaller and younger communities, not to wait, in characteristic American fashion, until an intolerable condition is upon them and has obtained a strangle-hold, before a remedy is attempted that will then be prohibitive in cost, but to plan *now* to avoid conditions that may in future years work hardships upon the community.

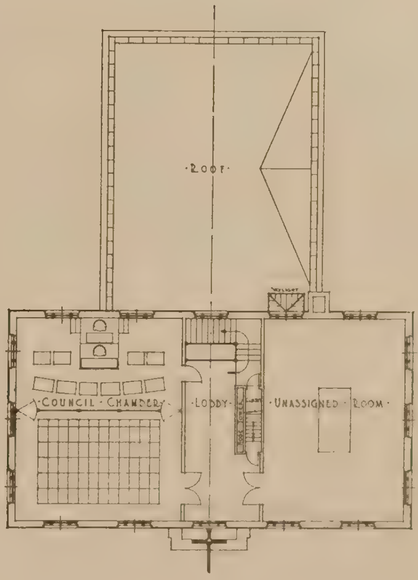
Chart No. I (p. 304) is general and shows the subcharts in their order. At the base of the preparation of a comprehensive town plan must be the desire and necessity for a better-

(*Continued on page* 304.)





FIRST FLOOR PLAN



SECOND FLOOR PLAN

MUNICIPAL BUILDING, DORMONT, PA.

Harry S. Bair, Architect.

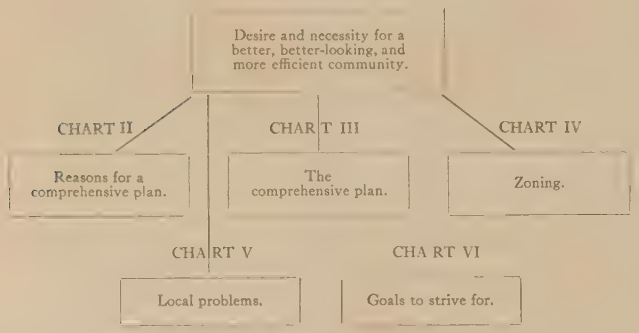
(*Continued from page* 302.)

looking and more efficient community, and by collective effort to make it such. Then follow the charts of arguments in favor of such a comprehensive plan, then those of the comprehensive plan itself and of zoning, with their various features explained in detail, then that of the local problems of the community that must be solved, and finally the chart of the goals to strive for.

This chart deals with the reasons why a comprehensive city plan should be prepared: First, to provide present and future generations with a thoroughly well-worked-out, scientific document and sound principles, that will guide them in their efforts toward development of the community from every angle and from year to year, until such documents and principles require revision in order to meet changed conditions. Second, to make your community a better place in which to work, live, and prosper. A better place in which to work, for one thing, because of better street traffic and transportation facilities that are afforded through an adequate street system, that will allow the fastest and most direct traffic, thereby conserving time, human effort, and resources of the community. The appalling losses of time and energy from this source to pedestrians, surface-cars, busses, and vehicles of all descriptions will foot up to an enormous total in most communities in the course of a year, and will increase from year to year in proportion to the increased use of motor cars and trucks, and again be it remembered that such losses are not only of concern to the individual, but to the entire community as well, since he is a part of it, and any reduction of his earning power is a loss of potential wealth to the community.

CHART I

GENERAL


Desire and necessity for a better, better-looking, and more efficient community.
CHART II
CHART III
CHART IV
Reasons for a comprehensive plan.
The comprehensive plan.
Zoning.
CHART V
CHART VI
Local problems.
Goals to strive for.

MAIN STREET, DAYTON, OHIO.

This shows a very favorable example of a modern business street in course of development. At present it has but a few moderately high buildings, yet even this street, which is 132 feet wide and has the additional advantage of running north and south, will in course of time be lined from end to end with tall buildings. At certain times of the day and year it will then cast a shadow 1,000 feet long, thus creating conditions similar to those existing in some down-town New York streets to-day.

The lower floors of the buildings lining such streets will inevitably lose renting value, and undesirable working conditions will be created as a result of the lack of direct daylight. In the following figures the approximate percentage of available direct daylight is given for buildings of various heights upon streets 60, 80, and 100 feet wide.

Assuming the windows to be within 8 inches of the ceilings, the clearstory heights to be 10 feet, and the rooms 25 feet deep, the lower three floors of a five-story building facing a 60-foot street will receive 65 per cent of direct daylight; in an 86-foot street, 86 per cent; and in a 100-foot street, over 100 per cent.

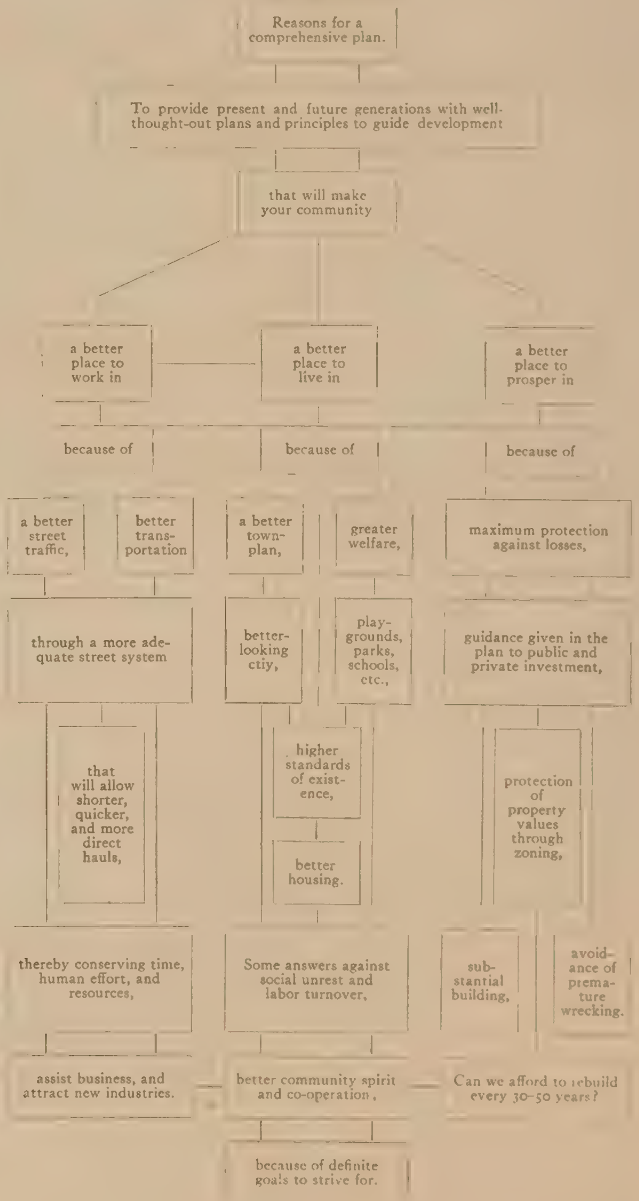
In eight-story buildings the lower three floors will receive approximately 30 per cent, 40 per cent, and 50 per cent respectively; in eleven-story buildings 21 per cent, 27 per cent, and 35 per cent; in fourteen-story buildings, 13 per cent, 17 per cent, and 20 per cent, etc.

The curve of per cent according to height of building is parabolic, whereas direct daylight increases in direct ratio to the width of the street, for the widths here assumed.

These figures apply only to direct daylight, and do not take into account any reflected light, which varies according to color and texture of outside walls, and of floors, walls, ceilings, and furniture used.

The relation of the width of streets to the height of buildings should receive the most careful consideration from city-plan commissions, architects, and property owners. City-plan commissions should likewise remember that each additional story allowed upon a given street width will increase the tenancy of the buildings and consequently add to the burden of traffic.

CHART II


Reasons for a comprehensive plan.
To provide present and future generations with well-thought-out plans and principles to guide development
that will make your community
a better place to work in
a better place to live in
a better place to prosper in
because of
because of
because of
a better street traffic,
better trans-portation
a better town-plan,
greater welfare,
maximum protection against losses,
through a more adequate street system
better-looking ctiy,
play-grounds, parks, schools, etc.,
guidance given in the plan to public and private investment,
that will allow shorter, quicker, and more direct hauls,
higher standards of existence,
better housing.
protection of property values through zoning,
thereby conserving time, human effort, and resources,
Some answers against social unrest and labor turnover,
sub-stantial building,
avoid-ance of prema-ture wrecking.
assist business, and attract new industries.
better community spirit and co-operation,
Can we afford to rebuild every 30-50 years?
because of definite goals to strive for.

In planning for an adequate street system, the width and number of major through-going, traffic-bearing arteries should be scientifically determined to take care of a peak load traffic at maximum speed that is compatible with safety, and that will cause the least amount of confusion, through provision of ultimate widening of such major streets, and opening up, if necessary, of parallel streets to properly take care of this traffic. This may also require the breaking through of some connecting-links.

The actual widening of such streets can be spread over a great number of years, and in most cases need not cost the community a penny. In some communities the strip of ground needed for street-widening has been donated by the adjacent property-owners; in others, where this voluntary co-operation cannot be had, the improvement is either charged against abutting and near-by properties that directly benefit through such an improvement, or the taxable values of these properties are raised in proportion to the increased value caused by the development, so that the increased income from taxation will ultimately cover the cost and interest charges of the improvement.

Besides the difficulties and handicaps of traffic and transportation, New York also presents the worst working conditions in many of its office and loft buildings, as far as light and sunshine are concerned, that can be found. In many of these artificial light must be used upon the brightest days, not a ray of sunshine being able to enter into many of the rooms of these buildings because they have made canyons of the streets, especially in the down-town financial district. However, as far as possible, the zoning law of 1916 has put an end to the further spreading of this evil.

Surely, such conditions cannot be considered satisfactory standards under which to work or to expect this and future generations to discharge their duties to the best and fullest extent! Other American cities are to a degree gradually acquiring this same evil in their business sections, and will eventually be as bad in this respect as New York's financial district, if they do not protect themselves through the laws against the possibility of such conditions.

The foregoing should prove the necessity for a comprehensive city development plan, because it provides for better working and business conditions, thereby assisting business and attracting new industries and people.

In every community there is much useless duplication of effort. For example, the statement is made by experts that an average of thirty per cent of the mileage of street-car lines is wasted because they have not been comprehensively planned.

Furthermore, the protection and guidance given through the comprehensive plan to public and private investments in permanent improvements will be a great factor in the avoidance of waste and in the stabilizing of values, for, are not in every community improvements constantly undertaken that are ill-considered, in that they have been planned without due consideration or good judgment as to the probable general development of the community, and, in the end, prove to be only temporary, or subsequently depreciate in renting value because the improvement is not in the right location?

Eventually such buildings that were intended to be more or less permanent are prematurely wrecked and have served only a fraction of their possible usefulness, in some instances less than ten per cent; in others the buildings remain, and make the corrections in the plan or a public improvement impossible, because the wrecking of one or more expensive buildings makes the cost prohibitive. In either case community resources and opportunities are wasted.

Can the nation, with all its resources and wealth, afford to rebuild a large percentage of its ill-considered buildings every fifty years or so?

The guidance given to public and private investment in a comprehensive plan is extremely important. It conserves capital, assists business in various ways, and stabilizes realty values. As later shown under zoning, New York City has lost untold millions because of the lack of zoning ordinance, and has saved this and future generations perhaps billions through this ordinance that went into effect in 1916.

In attacking this problem the community must make clear to itself that present standards will soon become out of date and that badly planned, unattractive, and poorly constructed housing becomes, from the start, not only a liability to the owner but to the community as well, since it will soon turn into low-class property and eventually slums, a scrap-heap of society and human endeavor, and a blot upon the community, and, furthermore, just so much resource and effort gone to waste. Accordingly, will your community be satisfied to accept as a standard the commonly seen long, dreary rows of detached apartment-houses, one like the other, without any individuality or merit in regard to looks; or will it accept as a standard spaces between detached houses that will not even let in sufficient light and air, let alone sunshine, or permit privacy; or will it allow dingy, insufficient courts in apartment-houses; or will it allow skimping in construction, that does not afford sufficient protection from temperature changes that cause discomfort and waste of fuel, or such construction that easily falls into decay and soon presents a dilapidated appearance?

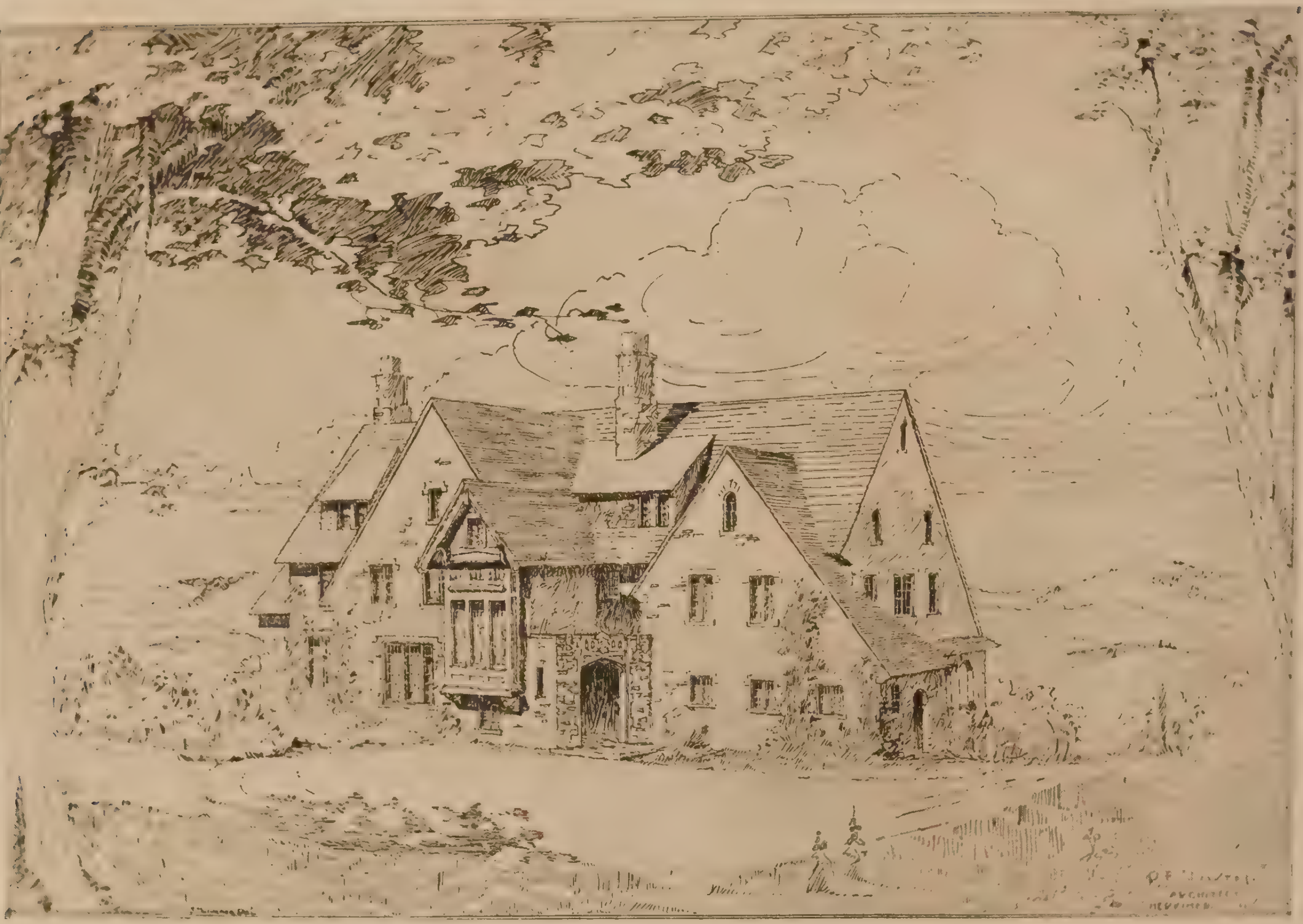
The questions of quality of construction and sufficient air and sunshine can easily be solved by ordinance regulations, but the remedy for bad planning and ugliness can only be secured by engaging the best professional services obtainable, and since the low-price property-owner or speculator cannot and will not go to the legitimate expense of engaging such services, these must be furnished by the government, either national, State, or municipal, such as the United States Government furnished in its war-housing activities, or as the State of Wisconsin is doing in furnishing small-house plans, or as the chapter members of the American Institute of Architects of various cities have recently done, when each member donated a set of well-worked-out, low-cost house plans to the public. However, the latter must be looked upon in the light that "every little bit helps," and not as a remedy. In the absence of governmental or municipal initiative it must devolve upon individual, or upon collective, responsible citizenship to furnish such services to the low-cost home-builders, if we are to have better-looking residential districts, and in the long run better investments to the owners of such property; and here again the question must be answered, Can the nation, with all its wealth and resources, afford to rebuild a large percentage of its housing every fifty years or so?

The proper consideration of all of the above items cannot help but increase local pride and patriotism and the spirit of co-operation and team-work of all classes and interests in the community, and ought to be one of the answers to the solution of the social unrest that is prevailing all over the land. It will prove a material factor in lessening the floating population and consequent labor turnover. The ultimate attainment of the goals inspired by a comprehensive plan and principles that a community sets for itself can only be had through the closest community spirit, co-operation, and team-work.

(*To be continued.*)

Tau Chapter House, Hamilton College, Clinton, N. Y.

R. E. Sluyter, Architect.



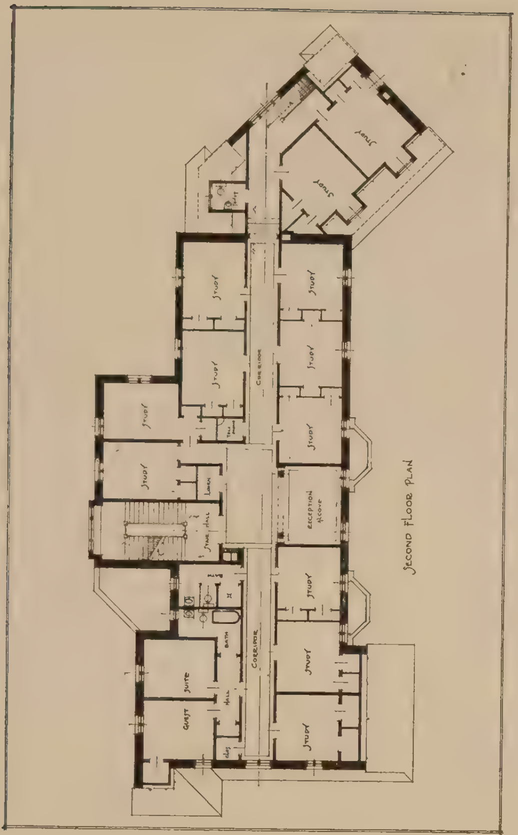
ON main floor note accessibility of all rooms and utilities from the hall without using any of general living quarters as run-way; the adequate and convenient entrances, coat-rooms, etc.; enclosed stair-shaft for fire protection, this enclosed stair-shaft being most effectively economical in control of heat; the two-front porch which can be glazed if desired; the unobstructed view from the living-room bays; the ample sun terrace; the dining-room down five feet to put it on same level with kitchens, etc., and thus avoid dumbwaiter service; the economical but convenient reception nook; the ample library to be used as sitting-room during dances; the well-arranged axes; excellent wall spaces; lounging spots in bays; ample windows, etc.

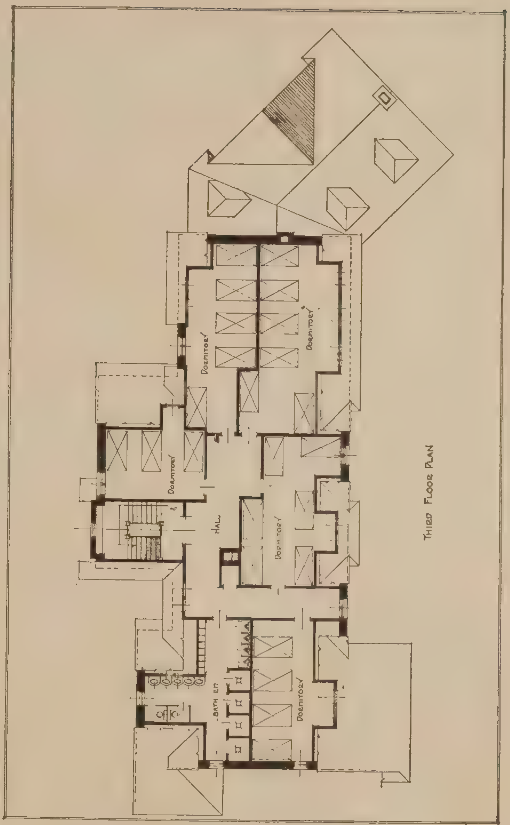
The second-floor plan calls for two-man studies of modest dimensions but carefully planned for special study furniture; a sitting-alcove at the head of the stairs; an alumni suite, with bath, so arranged that two rooms, with bath, can be shut off from the rest of the floor for house-party chaperons, or to allow an alumnus—even with his family—suitable lodging. Wash-rooms are intended to be sufficient for needs of house-party guests, as the second floor would be turned over to them. The enclosed stair-shaft, in addition to its fire protection, makes a second stairway to the third floor really unnecessary at house-party time. It is intended that individual living arrangements be distinctly not luxurious, but simple, plus much-needed adequate sanitary facilities.

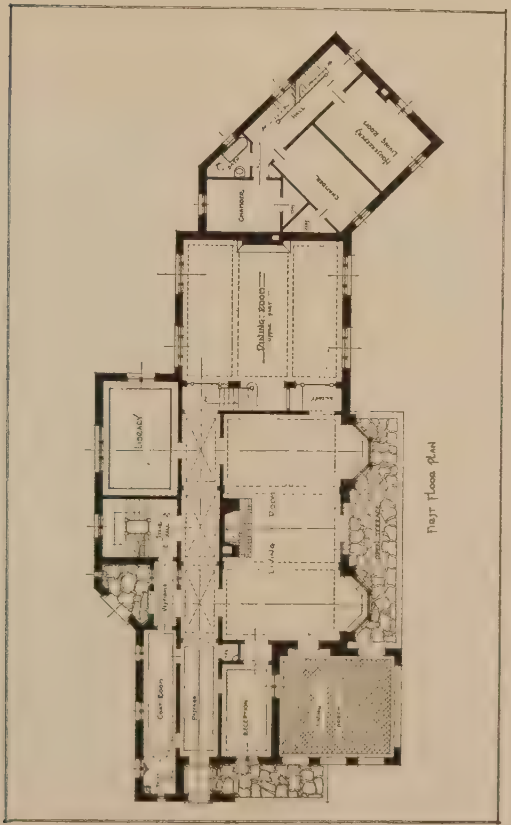
The third floor is divided into small dormitories according to the generally adopted and most approved plan in modern fraternity houses—and the plan approved by the active chapter. Showers and wash-room facilities are concentrated on this floor. Ample cross ventilation will be secured through transoms. This floor will be kept cool for sleeping, though ample heating will be provided. Finish and floors can be as economical as judged proper. The enclosed stair-shaft is a great addition to the safety of the sleeping-floor in event of fire. At house-party time the third floor will be occupied by the men. Bed equipment will be partly single cots, partly double-deckers. Sleeping quarters so arranged will also enable alumni returning to Commencement to be adequately housed in larger numbers.

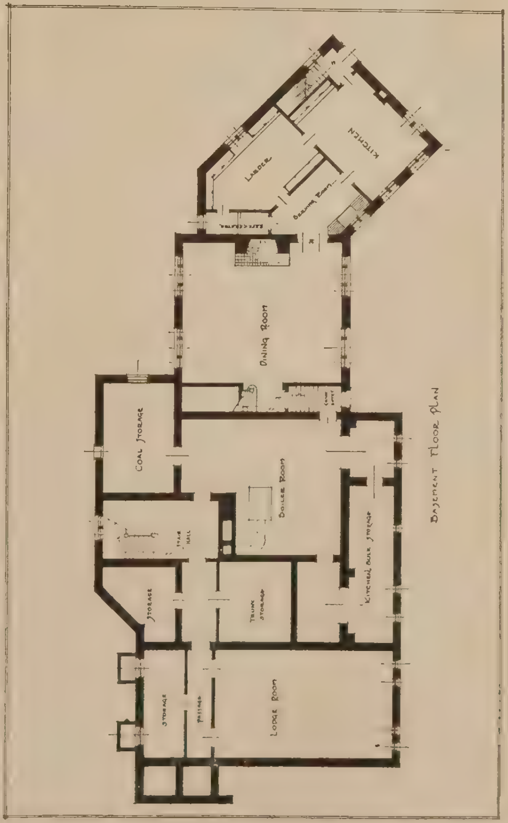
The basement floor includes on one level the dining-room and service with sufficient room for live storage; on the other ample coal and provision storage, heater-room, etc., and the large Lodge Room—which can be decorated and furnished at convenience—with separate stair from main floor. Some of this floor could be utilized for billiards, etc., if desired.

The sun terrace, lowered dining-room level, low service wing will keep the house to the slope and hide artistically the great drop on which the house will stand. This general arrangement seems the only wholly satisfactory one on this site—one that will give light and air to the service quarters, dining-room, and basement.









TAU CHAPTER HOUSE, HAMILTON COLLEGE, CLINTON, N. Y.

R. E. Sluyter, Architect.

Construction of the Small House

By H. Vandervoort Walsh

Instructor in Architecture, Architectural School of Columbia University

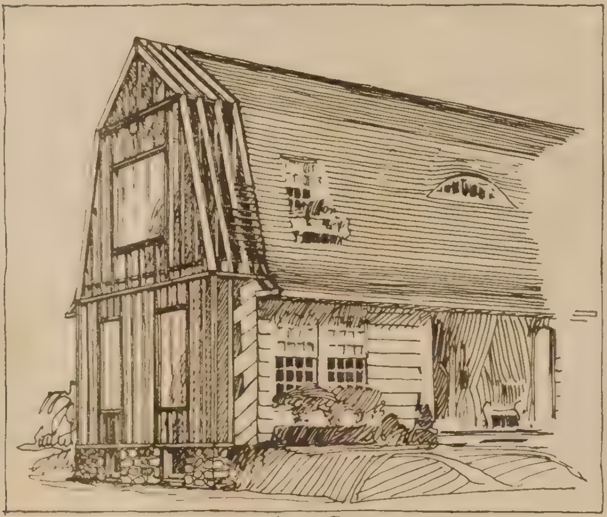
ARTICLE II

GENERAL TYPES AND COSTS

Types of House Construction

Type I

ALL small houses may be classified into four types, according to their construction. The first type is the commonest and is the wooden-frame structure. This has exterior walls and interior partitions built of light wooden studs, and the floors and ceilings framed with wooden joists.



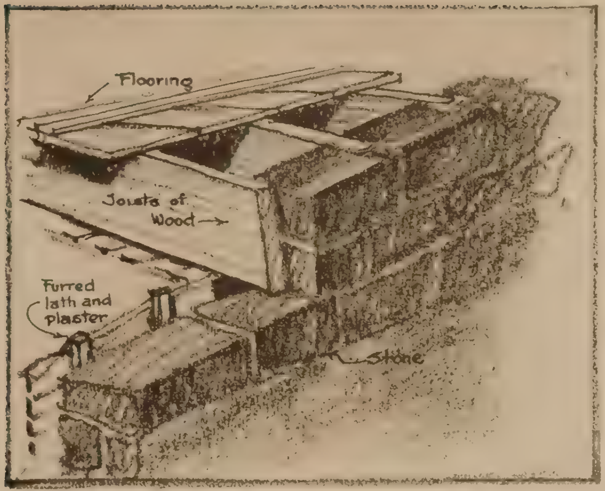
Type I Wooden Frame

The exterior walls may be covered with clapboard, shingles, stucco, brick veneer or stone veneer. The roof is generally covered with wooden shingles, although slate, tile, asbestos, and asphalt shingles are often used. These houses are the most numerous, because the cost of wood in the past has been so much less than other materials that they appealed to the average builder's financial sense. However, the cost of such dwellings to the country has been very high, for they are extremely dangerous when attacked by fire. More than twenty-two millions of dollars are wasted in fire each year in these houses. These dwellings also cost us a great deal in up-keep. It would be interesting to see what was the total cost per year to repaint them and keep the roofs in order. It certainly would run into the millions. Although wood has increased from about $30.00 per thousand board feet to about $85.00 in the Eastern markets from pre-war days, yet the wooden house is still listed as the cheapest, for the cost of other materials has also increased, as brick from $10.00 per thousand to $25.00 until very recently, and cement from $2.00 to $4.50 per barrel. In any comparison the wooden-frame building is taken as the base or cheapest type of construction, although it is the most expensive in up-keep and fire-hazard of all. Until the price of wood increases in excessive proportion to other materials, there is no doubt that this type of house will be the commonest. However, there is much that can be done to make them more fire-resisting, and although we cannot look to the speculative builders to use such methods, since they increase the costs slightly, yet the architect should not overlook them.

Type II

The second type of dwelling which is next in vogue has exterior walls of stone, brick, concrete, or terra-cotta, and interior floors, partitions, and roof of wooden-frame construction. These are very slightly more fireproof than the wooden-frame structure, and as a class they are more costly in the beginning, but require less expense in up-keep. They resist attack from external fires better than the wooden-frame building, but if the fire starts within, they will burn just as readily. Although the fire loss per year of this class is not nearly as great as for the first type, yet it must be appreciated that there are not so many of them. The chief advantage of the masonry house of this second type lies in the lowered cost of up-keep, longer life, and saving of heating-fuel in the winter. A great deal of literature has been circulated by brick, cement, and hollow terra-cotta tile manufacturers by which the public has been educated to believe that this type of structure is much more fire resisting than it is. Of course this campaign of education was intended to stimulate interest in their product, and it had no unselfish motive back of it. The result of this propaganda is evident in the public belief that such houses are fireproof houses, while as a matter of fact they are not.

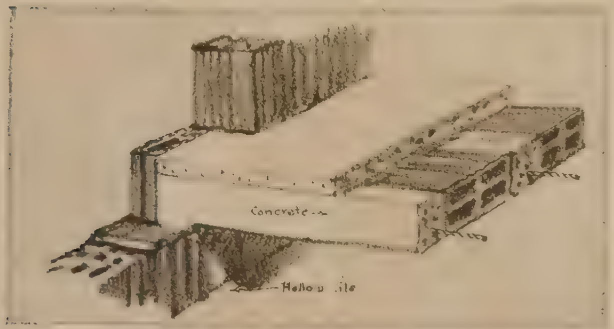
Type II Masonry and Wood



Type II · Masonry walls · Interior Wood

Type III

The third class of dwelling is quite rare, and very few small houses are built that could be classified under it. Some builders call them fireproof houses, although this is erroneous. These buildings have walls, roofs, floors, and partitions built of incombustible materials, but the finished floors, the trim, windows, and doors are of wood. The exterior walls are of masonry construction, and the construction of the floors and roofs consists of steel beams with terra-cotta arches or concrete floor slabs, spanning in between them, and the partitions are of terra-cotta, gypsum, metal lath and plaster, or other similar materials. They may also be built of reinforced concrete throughout, or any other combination of these materials. There have been very few examples of this kind of construction used in the small house. It is an unfortunate condition that it is more adaptable to the costly mansion than to the average house of the middle-class citizen, for the high cost of construction of this character, in most cases, permits it to be used only by the wealthy man. Examples where such houses have been built generally show an investment of $30,000 or more, or, if they were built to-day, $60,000 or more. Those attempts to use this form of construction in the small house have been made by large building corporations, and have been chiefly represented by concrete houses of very ugly design.



Tye III Walls, floors, partitions fire-proof, but windows, doors and trim of wood.

Type IV

The fourth and last type of dwelling is the ideal fireproof house, but it is so costly that very few examples exist. This type can be termed fireproof with accuracy, for all structural parts, including doors, windows, and trim, are of incombustible materials. Metal trim is used or wood that has been treated to make it fire-resisting. This latter class of construction is so out of the reach of the average home-builder, on account of its cost, that its value cannot be thoroughly appreciated. Practically the only examples in existence are large mansions, built by wealthy clients.

Cost Does not Indicate Fire-Resistance

In this classification of buildings, it would almost seem that the cost of a building indicated its fireproof qualities. This is not true, however. There are many expensive dwellings which are just as great fire-traps as the less expensive ones. In both cases the fire hazards are the same, if they are built of the same type of construction. In fact, we could build a $60,000 dwelling according to Type II, and also a $10,000 one according to Type II, and make the latter more fire-resisting than the former by using certain precautions of construction in which the spread of fire is retarded.

Except in unusual cases, then, it can be seen that the construction of the ordinary dwelling will be either according to the first or second type, and that any fire precautions that are desirable must be applicable to them. Most comparisons of relative costs are made between the dwellings included under these two types, and the difference will be mostly a difference in the kind of exterior walls used in the construction. In fact, if any comparisons are made between different kinds of buildings, as to their relative costs, it is essential that only one feature be made variable and that all others be kept the same.

Comparative Costs

In order to appreciate the difference in cost, due to the kind of exterior wall used, the following estimates are given.

Comparative Costs of Houses of Types One and Two

Pre-war Conditions

TYPE ONE

1.	Wooden frame, covered with clapboard	100 per cent
2.	" " " " shingle	101.6 per cent
3.	" " " " stucco	102.9 per cent
4.	" " " " brick veneer	105.8 per cent

TYPE TWO

1.	Exterior walls of hollow terra-cotta tile and stucco fin.	106.3 per cent
2.	" " " brick—10-inch hollow type	109.1 per cent
3.	" " " hollow tile, brick veneer	110.7 per cent
4.	" " " 12-inch solid brick wall	113.0 per cent

The following comparative costs were made for the present unstable conditions of the market, and their accuracy is only relative.

Comparative Costs of Houses of Types One and Two

Present-day Conditions

TYPE ONE

1.	Wooden frame covered with stucco on metal lath	100.0 per cent
2.	" " " " siding and sheathing	100.05 per cent
3.	" " " " brick veneer on wooden sh.	105.87 per cent

TYPE TWO

1.	Exterior walls of hollow terra-cotta tile, brick veneered	106.5 per cent
2.	" " " 8-inch thick brick	106.75 per cent

These two tables are enlightening, to show that, although materials have advanced in price, they have advanced in almost similar proportions, and that the comparative values between the different kinds of exterior walls are almost the same as before the war.

Approximate Costs

Besides desiring to know the relative costs between different kinds of houses, the architect is constantly up against the problem of approximating the cost before he starts his plans. His client comes to him and tells him that he wants a house to cost about $12,000, and then asks how much of a house can be had for this sum. In order to approximate this figure, the architect must use the cubic-foot system of estimating. Now, while formerly this system was fairly accurate, to-day it is almost impossible to give a snap judgment as to cost on the cubic-foot basis. The only safe way is to take the cost of last month's houses and add about 20 per cent, say some contractors. Others say it cannot be done at all.

Not only does the constant change in prices make the cubic-foot system of estimating inaccurate, but there are variations in cost due to the difference in interior trim and arrangement of the same type of building. For instance, the four-room cottage requires the same amount of plumbing as the eight-room house, both having one bath, and the cost for this equipment will be the same in each case, yet the difference in cubage will be double in the larger one over the smaller. A house which has much built-in furniture, like bookcases, linen closets, buffets, etc., is going to cost more per cubic foot than one without them. All of these factors must be taken into consideration when using the cubic-foot system of estimating.

Cubic-Foot System of Estimating

It is necessary to have the same uniform system of determining the cubage, if the same results are desired. The following is the generally accepted method:

1. Determine the total building area of the ground floor, extending from outside wall to outside wall. This should include accurately all offsets and projections.
2. Determine the average height of the building from the cellar floor to the average height of the roof. Where gambrel roofs are used, the average height is taken to a distance one-half the height from the top floor to the peak of the roof.
3. Multiply the above together for the cubage.
4. Porches should be added at one-quarter of their cubage, but if the second floor of the building projects over the porch, it should be figured in with the building.

The costs which are given here for the cubic foot are for the eastern section of the country, and cover a building having hardwood floors, cement basement floor, plastered walls, steam heat, modern plumbing, electric lights, and an unfinished attic. It must also be appreciated that the figures are for a two-story house, and they may be slightly reduced for a one-story. This is because the two-story house has proportionately more of its interior finished than the one-story.

Prices per Cubic Foot for Two-Story Dwelling

(*June* 1, 1920, *near New York City*)

Type I

1. Wooden frame building covered with siding, stucco, etc., costs from 40 cents to 45 cents per cubic foot.
2. Wooden frame building covered with brick veneer costs from 44.5 cents to 49 cents per cubic foot.

Type II

1. Exterior walls of brick, hollow tile, or concrete blocks cost from 45 cents to 50 cents per cubic foot.
2. Exterior walls of monolithic concrete cost from 48 cents to 55 cents per cubic foot.

If any elaborate work is designed for the interior, the costs will run up as high as 75 cents per cubic foot, and in large houses often as high as $1.00 per cubic foot. It is almost impossible to judge the value of a house design without having a few recent examples to compare, since there is required a considerable amount of common sense in using the cubage cost.

Factors Influencing the Selection of Materials

From what has been previously stated, it will be noticed that, as a rule, the architect in selecting the kind of material with which he will build his house is limited on account of expense to the first two types of construction—namely, the frame dwelling and the masonry house with wood interior. The latter two fire-resisting types are better fitted to the larger mansions where expense is not so important an item. Undoubtedly the comparative costs between the various kinds of exterior walls will have much to do with the selection; but more often the local conditions will outweigh these considerations. In some places, a house built of stone will be the best and most economical, in others, where there is an abundance of good sand, the cement house will be suitable, while those located near brick centres will find this material adaptable.

The ideal method, of selecting a material of construction purely from an æsthetic point of view, is not always possible. But, after all, is not the most abundant local material the most harmonious to use for any one locality? Nature adapts her creations to the soil and the scenery into which she places them. All her animals are marked with colors which harmonize with the woods or fields in which they live. In fact this harmony is their protection, and in the war we imitated it in our camouflage painting. It is astonishingly evident, in the New York Museum of Natural History, how far more beautiful are animal tableaux which are set in painted scenery, representing accurately their natural habitat, than those which are exhibited alone in the cases, without a suggestion of their surroundings. Their marks and colorings seem ridiculous when they are separated from their natural surroundings. The same principle holds true in selecting the material for the small house. A stone house, built of native stone, in a stony, rugged region is the most harmonious of all. A cement house in a flat, sandy country always seems in accord with the scene. A brick house in hills of clay most certainly appears the best, and a wooden house, near the great outskirts of the timberland is a part of the inspiring picture. Why are so many of the old colonial houses so charming? One of the reasons is the careful use of local materials.

Some Principles of Economical Design

In the first architectural studies of the house, since this problem of cost is ever with us, it is well to be familiar with some of those broad and general principles of economical design.

The lower we keep our house to the ground, the less will be the expense of labor, for, when work must be done above the reach of a man's hands, it means the construction of scaffolds and the lifting by special hoists of the materials. This is not so important a consideration with the light wooden frame building as it is with the masonry house. Wherever we have brick, stone, or concrete exterior walls, for the sake of economy they should be built low. Mr. Ernest Flagg has found this to be so very true that, in houses which he is constructing at Dongan Hills on Staten Island, he has carefully limited the height of all walls to one story, and starts the construction of his roof from this level. Of course, at the gable end of the house, it is necessary to carry them up much higher. Now, the starting of the roof from the top of the first floor makes all the second floor come within the roof, and this heretofore has been impracticable, on account of the great heat generated under the roof and the inability of dormer windows to ventilate the rooms properly. Mr. Flagg has solved this problem by inventing a simple roof ventilator which is located on the ridge of the roof, and serves the purpose of both lighting and ventilating. So successful has this been, that the space which in most houses is called the attic, and is wasted, has been made available and livable. What he has accomplished by these ventilators is the ability to start the roof at the top of the first floor, and thus lower the exterior walls and set the attic in the place of the second floor and make it very livable. Not only does this principle of design save considerable money, but it follows one of those great laws of beauty, so prevalent in nature. It makes the house low and nestling in the landscape, thereby harmonizing it with the surroundings. The house of the uncultured speculator stares blatantly at you and is proud of its complete isolation and difference from the landscape; but the house of those who have taste is modestly in harmony with the surroundings. The ugly house thrusts into the air without close connection with the ground, while the comely one cuddles in nature's lap. Is it not strange that this principle of economy is a law of beauty?

There are other features of economy in design which should be observed. The simpler and more straightforward the design, the cheaper it is and the more beautiful it can be made in the hands of the good artist. Simplicity is the highest art, as it is also the most economical thing. Likewise the cost of a house can be reduced by shaping as nearly to a square as possible, and reducing the outside walls to the minimum. The semi-detached house in the group plan accomplishes this in the best manner, and gives to the whole structure that low, long sky-line that is so very pleasing. This also makes one soil line and one chimney do for both houses, a great point in economy. As was said in the last article, some architects believe these group houses are the only solution to the problem of the small house.

The Nebraska State Capitol Competition

We are in receipt of the following letter from Mr. Willis Polk, of San Francisco:

"To the Editor of Architecture:

"Referring to your comment on the State Capitol Competition in your August number, your conclusions in that comment seem to coincide with the opinion of the late D. H. Burnham, as expressed by him in a letter twelve years ago:

"'We are not ourselves believers in the value of competitions and it is our custom not to engage in them. Our belief is that an Architect, properly trained by experience in the class of buildings he is called upon to undertake, when once fully informed as to the particular conditions of the problem, can produce as many different sketches as could be produced by a number of Architects, and that in any case the real solution can be arrived at only by the process of successive elimination through a series of studies in which the Architect and the Owner work closely together.'"

Announcements

Arthur Dahlstrom, architect, formerly located at 612 Andrus Building, is now occupying offices at 305 Essex Building, Nicollet at 10th Street, Minneapolis, Minn.

Harold Holmes, architect, announces that he is now located in his new studio building, 151 East Chicago Avenue, just east of the drive.

Mr. C. Frank Jobson, architect, of Chicago, announces his office is now incorporated under the name of Jobson & Hubbard, with offices at 225 North Michigan Boulevard, Chicago.

The Boston Varnish Company is following a progressive idea in having had prepared a series of practical detail sheets showing the use of their products in colonial architecture. They cover a variety of subjects and are carefully measured and drawn by Edgar and Verna Cook Salomonsky. Architecture will reproduce one sheet each month in its advertising section. The series of twelve, enclosed in a folder, will be mailed to any architect who will make a request for same to the Boston Varnish Company.

A partnership for the practice of architecture has been formed by Henry T. Barnham and Charles L. Hoffman, under the firm name of Barnham & Hoffman, architects and engineers, Chamber of Commerce Building, Richmond, Va.

Japanese Old-Timers in Electrical Industry

STUDENTS of the growing American enterprises in the Far East will be interested in the statement issued by the Nippon Electric Company of Tokyo, the Japanese subsidiary of the Western Electric Company of New York. Organized under American supervision less than a generation ago to manufacture the telephone and many of the other electrical requirements of Japan, the Nippon Company had 1,340 native employees in its personnel when its fiscal year closed recently. Of these, 143 had been employed by it over ten years, 29 over fifteen years, while 11 had seen over twenty years of service. All of these Japanese electrical workers were men with the exception of 7.

Following the system used by the Western Electric Company in America in rewarding length of service among its employees, the Nippon Electric Company gave a dinner to its old-timers at Sanyentei. Gold buttons and certificates of service were presented to all those who had passed the ten-year mark.

Book Reviews

OLD NEW ENGLAND HOUSES. By Albert G. Robinson, author of "Old New England Doorways." With nearly a hundred illustrations from the author's unique collection of photographs. Charles Scribner's Sons, publishers, New York.

Mr. Robinson's former book on doorways, of which a new and enlarged edition uniform with "Old New England Houses" has been made necessary to meet a wide demand, met with instant approval by both architect and layman.

In the new volume, for which he writes an introduction that is a brief but illuminating review of the development of the various architectural types of New England, are included nearly one hundred examples of old houses gathered from all parts of New England. These represent not only some of the stately old mansions of the well-to-do, but as well many of the simpler smaller houses that line village streets or perch here and there on the warm shoulder of some far-seeing farm hillside.

The author says that these old houses may be divided into four groups, the difference being marked by the roof. One group includes the buildings, whether of one or two stories, with sloping roof of equal length in front and back, mere rectangular boxes of varying size and proportions, with a doubly sloping cover. These are commonly known as "gable" or "pitch" roof houses. Not a few of this type show an attached ell, but in most cases, if not in all, this is a later addition. A second group shows the "lean-to" with the extension of the roof-line in the rear. While much more common to houses of two stories in front, the long back roof appears occasionally on houses of a single story. A third group includes the "gambrels." In his poem "Parson Turell's Legacy," Doctor Holmes gives the origin of the term:

> "'Gambrel?—Gambrel?' Let me beg
> You'll look at a horse's hinder leg,—
> First great angle above the hoof,—
> That's the gambrel; hence gambrel-roof."

I am not prepared to say whether this is reliable information or a product of the genial autocrat's fertile imagination. But old houses with gambrel roof are abundant in New England. The form is used in quaint cottages and in stately mansions like the "Dorothy Q" house in Quincy and a number of others. The design appears to have been borrowed from the Dutch, but it was used in New England as early as the last quarter of the seventeenth century. While the use of the dormer-window, common enough in the South, was unusual in the North, it is of frequent occurrence on houses with the gambrel roof, both one and two storied. But there is a material and not fully explained difference between the New England gambrel and its prototype. The latter is quite the more graceful. Its upper slope is much shorter and its lower slope less steep than is the New England roof. While grace is lost, the New Englander gained in area of headroom in what was, in effect, a second story. The fourth group consists of the pyramidal type or "hip" roof, usually square boxes with the roof sloping from the four sides to a common centre. This also shows variations in roof angle as related to the wall of the house. Also, while in many cases the four slopes met at a central peak, or stopped at the walls of a large central chimney, in many other cases they terminated at the edge of a flat platform around which, frequently if not usually, a low railing or fencing was built.

Many visitors to old Mystic will remember a whole row of these square boxes on "Skipper Street" (we protest against the reported change of such a quaintly descriptive name of the street to such a commonplace one as something or other avenue), on top of which may be observed "The Captain's Walk," a little square or round observatory surrounded by a railing.

The architect will find these Old Houses a useful and suggestive book as a reference with their many variants of the Colonial style.

With the "Doorways" it gives him a very comprehensive presentation of the period dealt with.

AN EPITOME OF HYDROTHERAPY, FOR PHYSICIANS, ARCHITECTS, AND NURSES. By Simon Baruch, M.D., LL.D., Consulting Physician to Knickerbocker and Montefiore Hospitals, Consulting Hydrotherapeutist to Bellevue Hospital, New York City, formerly Professor of Hydrotherapy, College of Physicians and Surgeons, Columbia University. 12mo of 205 pages, illustrated. Philadelphia and London: 1920. W. B. Saunders Company.

The chapter on "Hydrotherapeutic Instalments," including plans of existing institutions and observations on common defects, will be of interest to architects who are planning hospitals or who want to be informed as to the best modern methods in hydrotherapy. The author emphasizes the importance of hydrotherapy in the curriculum of the nurses' training schools and of its great usefulness in our reconstruction hospitals.

A MANUAL OF FACE BRICK CONSTRUCTION. American Face Brick Association, Chicago.

A book intended to show the value of brick as a building material and to serve as a manual for the builder. The introduction includes an interesting story of brick from primitive times. It is, above all, a book of practical value and the many fine plates in color, with plans and details of construction, should prove a useful reference in the architect's library.

BRICK FOR THE AVERAGE MAN'S HOME. A Selection of Thirty-five Designs for Practical and Artistic Homes, including Cottages, Bungalows, Houses, and Apartments. The Common Brick Manufacturers' Association, Cleveland, Ohio.

Another book of practical service. Its many attractive drawings of typical houses of brick with working drawings and specifications belong in the architect's library with the book referred to above.

The two books admirably supplement each other.

FORM PROBLEMS OF THE GOTHIC. By W. Worringer. Authorized American edition. G. E. Stechert, New York.

This book may well be called an attempt to arrive at the principles of Gothic by way of æsthetic theory, a study of art as human psychology. "The history of architecture is not a history of technical developments, but a history of the changing aims of expression, of the ways and means by which this technic conforms and ministers to the changing aims through ever new and different combinations of its fundamental elements."

This edition is translated from the third German edition, according to a preface written in Berne in 1912.

Wooden Doors Dating Back to Middle Ages

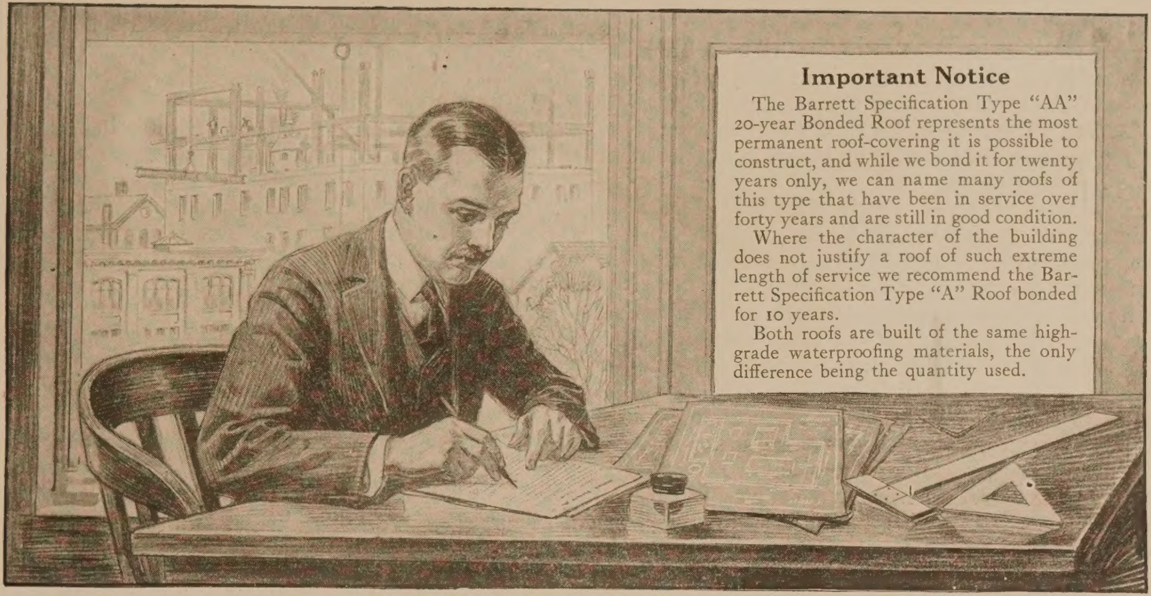
AMONG the famous doors of history are the carved wooden doors of the church of Santa Sabina, Rome, depicting, in relief, scenes from the Old and New Testament. These are one of the most remarkable examples of early Christian sculpture extant.

In the earliest times, as in Babylon, doors swung on sockets instead of hinges. In Roman days wooden doors were decorated with bronze and inlaid, and throughout the Middle Ages richly carved doors of wood adorned the churches. In the Gothic period, wooden doors were decorated with wrought-iron hinges which were often elaborated into intricate ornamentation covering a large part of the door. The doors of the cathedral of Notre Dame in Paris of the thirteenth century are the finest examples of this class. During the Renaissance in Germany and France elaborately carved doors were among the most beautiful products of wood sculpture.

Some of the old English doors were formed of narrow planks placed side by side and in dwelling-houses generally in the Middle Ages the doors were small and fairly simple, meant for strictly practicable purposes and often provided with some means of defense. The doors of the Norman period were round-headed, while with the thirteenth century came the doorway with the pointed arch and later the flattened arch.

In the case of interior doors, splendid old polished mahogany doors were important features in some old English homes, and there were old oak doors of wonderful beauty, especially when found in oak-panelled rooms.

Haphazard selection of doors of the ready-made variety should not be allowed in the building of a fine home, but the doors should be designed by the architect who builds the structure that they may be in keeping with the general style of the house. Upon the attractiveness and distinction of the door and doorway depends the visitor's first impression of the home he is about to enter.



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The Definite Specification

From Editorial Page, American Architect, N. Y.

"THE physician who made a practice of prescribing certain drugs or others whose * * * * properties were similar—would soon lose the confidence of his patients, and yet that is in effect what the architect is doing who persists in the outworn and discredited practice of writing 'or equal' after the specification of a given material. * * * *

"Unless he entirely neglects to perform his function and leaves the decision to the builder, he must sooner or later determine what is to be used and, considered both from the standpoint of the client's interest and his own reputation, it would seem to be desirable that he * * * * make his decision *when the specification is written* rather than *after the contract is let.*

"The old argument, * * * * that a definite specification fosters high prices, has been effectually disposed of by leading architects. * * * * It is evident that no manufacturer of standing and responsibility would take advantage of a definite specification to increase his price. To do so as a policy would be business suicide. * *

"If there is but one article or material that will, in the opinion of the architect, give better results than any other, he should have the moral courage to specify it outright."

Barrett Specification Roofs

Bonded for 20 and 10 Years

The Competition for New York's Memorial Army and Navy Club

LEADING architects of the country will be asked to submit competitive drawings of the $3,000,000 club-house the Army and Navy Club of America is to build in New York in memory of the three thousand five hundred officers who died in the war. The memorial will be a national one, dedicated to the commissioned men in all branches of the service who made the supreme sacrifice.

Charles Dana Gibson, Edwin Howland Blashfield, Henry Bacon, and Benjamin Morris, with Admiral Bradley A. Fiske, president of the club, form the committee appointed to select the design for the building.

Notable contributions have been made to American art and architecture by members of the committee on design. Edwin Howland Blashfield decorated the great central dome of the Library of Congress. His war posters attracted international attention. His most recent important work was the design for the government's certificate of honor issued for every man who died or was wounded in service during the war.

The impressive Lincoln Memorial at Washington was designed by Henry Bacon. He formerly was a member of the firm of McKim, Mead & White. He is a member of the National Institute of Arts and Letters, and the National Academy of Design.

Benjamin Morris was the architect for the Junius Spencer Morgan Memorial at Hartford, the Westchester County Court House at White Plains, and is the designer of the new Cunard Building at 25 Broadway, New York. He is president of the Society of Beaux Arts Architects.

Charles Dana Gibson is known throughout the world as an illustrator. He has a wide personal acquaintance among artists and architects. *Life* was recently purchased by Mr. Gibson, and he is now its publisher.

The new club-house will be centrally located and will serve not only as a monument to the men who died but also as a home for living officers, active or retired, in the army, navy, or State militia. Civilians interested in the nation's defense are also eligible for associate membership.

The committee on design will decide the rules governing the competitive drawings the club will request of all the leading architects. Only tentative plans have been decided on, but interesting features of the new building are included in these.

The memorial feature will probably take the form of a central court or hall with bronze-panelled walls where the names of those who made the supreme sacrifice will be engraved.

In the new club-house there will be at least four hundred bedrooms. A large dormitory, furnished with cots, will also be provided for use on special occasions when the city is crowded with service men.

There also will be a large assembly hall and small rooms for meetings of patriotic societies. Women friends of members, or women relatives of the deceased men, will find a dining-room and reception-room for their exclusive use. Other features to be found in a modern club-house will be included in the plans.

The club recently broadened its scope so as to include in its membership all officers, ex-officers, and all commissioned men with the Allied armies during the war, numbering approximately two hundred thousand.

Among the men recently elected to life membership are: Henry P. Davison, who is chairman of the civilian committee; Vincent Astor, lieutenant in the navy during the war; Elmer A. Sperry, inventor of the gyroscope; J. P. Morgan, Arthur Curtis James, Charles H. Sabin, Brigadier-General Guy E. Tripp, Brigadier-General Samuel McRoberts, and others of equal prominence.

Mortgage Tax Exemption

WE are indebted to the *Metal Lath News* for the following clear statement on a vitally interesting question:

"The construction industry has been worried about the transportation situation, but the minute that the banks were unwilling to float loans, building activities stopped and railroad conditions and coal became only incidental.

"The banks were obliged to stop construction loans, not because of prices of materials, but because they could not dispose of the real-estate mortgages to their customers. This was largely due to the federal income tax which, with its heavy surtax on the larger incomes, makes mortgage buying at 6% absolutely impossible. Exactly how this works against the larger incomes—the sources of most of the investment money—is seen below.

"The present agitation to make mortgages on homes exempt from federal tax should, therefore, be thoroughly understood by those who are in the building business, and who are now powerless to aid in the housing shortage, because loans are not available.

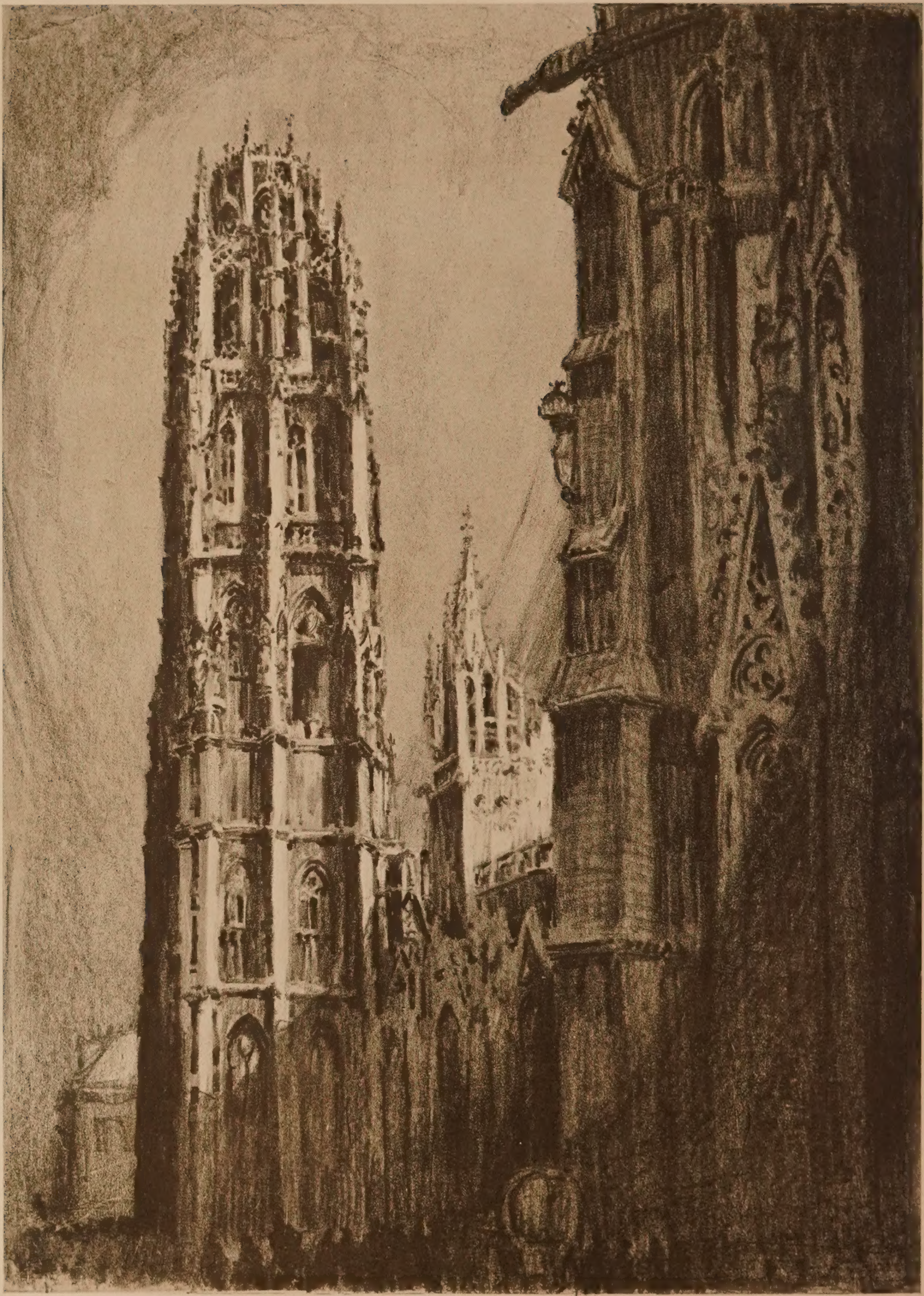
"No one factor is as vital to the safety of the whole country as the building of homes, and it is, therefore, the privilege as well as the duty of every one connected with the building industry who understands this situation and whose very livelihood depends upon construction activity, to advocate legislation which will release vast sums for home-building.

"The government—that means the people—have within their reach a very powerful force to attract sufficient capital to the construction of homes if it is only called into play. To encourage American manufacture, a tariff was imposed, and to increase farm loans and municipal improvements, exemption from federal income tax was inaugurated.

"No one can blame the man with an annual income of $50,000 for refusing to make investments that will yield but $412 on $10,000 when he can get $600. It is good business for rich man or poor to make the investment that looks most profitable, so a unified appeal to every member in Congress for the tax exemption of mortgages is now the only logical solution.

"The bulk of new money for mortgages must come from estates and individuals having such excess funds as are not available until incomes of $20,000 or over are reached. As an example, an income of $30,000 is subject to a federal normal and surtax, totalling 21% in addition to the income taxes levied by several of the States. This income tax must be deducted from the gross return on the mortgage before the net return to the investor is found.

"To compete with the 6% municipal bond which is exempt from income tax, the banks cannot offer a $30,000 investor anything less than 7.6% on a taxable mortgage, or to the $50,000 investor anything less than 8.7% and have him come out even. With mortgages tax exempt, however, they could readily be sold at 5% and 6% bases."



THE BUTTER TOWER, ROUEN.

From the lithograph by Howard Leigh.